

**CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY/NEGATIVE DECLARATION**

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT INFORMATION

PROJECT TITLE: Former Union Carbide Corporation Torrance Distribution Facility Remedial Action Plan		SITE CODING: 400483
PROJECT ADDRESS: 19500 Mariner Avenue	CITY: Torrance	COUNTY: Los Angeles
PROJECT SPONSOR: The Dow Chemical Company	CONTACT: Audrey Sidebottom	PHONE: 780-998-5767
APPROVAL ACTION UNDER CONSIDERATION BY DTSC: <input type="checkbox"/> Initial Permit Issuance <input type="checkbox"/> Permit Re-Issuance <input type="checkbox"/> Permit Modification <input type="checkbox"/> Closure Plan <input type="checkbox"/> Removal Action Workplan <input checked="" type="checkbox"/> Remedial Action Plan <input type="checkbox"/> Interim Removal <input type="checkbox"/> Regulations <input type="checkbox"/> Corrective Measure Study/Statement of Basis <input type="checkbox"/> Other (specify):		
STATUTORY AUTHORITY: <input type="checkbox"/> California H&SC, Chap. 6.5 <input type="checkbox"/> California H&SC, Chap. 6.8 <input checked="" type="checkbox"/> Other (specify): Voluntary Cleanup Agreement, pursuant to H&SC section 25355.5(a)(1)(C)		
DTSC PROGRAM/ADDRESS: Site Mitigation and Restoration Program, 5796 Corporate Avenue, Cypress, California 90630	CONTACT: Joe Hwong	PHONE: 714-484-5449

PROJECT DESCRIPTION:

OVERVIEW OF THE PROJECT

The California Department of Toxic Substances Control (DTSC) proposes to implement the Remedial Action Plan (RAP) for the former Union Carbide Corporation (UCC) Torrance Distribution Facility (proposed project). A RAP is a document that details the steps to be taken in the implementation of the selected remedial response actions at a site in order to remediate environmental conditions. The RAP would be implemented under the terms of UCC's Voluntary Cleanup Agreement with DTSC and would include a combination of remedial activities including in-situ geochemical stabilization, soil vapor extraction, shallow soil excavation, and institutional controls in the form of restrictive land use covenants along with natural attenuation processes.

The purpose of the proposed project is to address the identified contaminants of concern concentrations in the soil, soil vapor, and groundwater to levels to protect human health and the environment, consistent with the current and anticipated future commercial/industrial worker uses of the property.

Historical investigations and sampling, along with ongoing groundwater monitoring analytical data have established that hazardous materials such as benzene, naphthalene, dripolene (a dense non-aqueous phase liquid [DNAPL]), and arsenic are impacting soil and/or groundwater at the project site. Based on the results of historical investigations and ongoing groundwater monitoring at the project site, shallow soil and the perched groundwater zone are the focus of remedial actions. Perched groundwater is groundwater occurring in a saturated zone separated from the main body of groundwater by a perching unit comprised of lower permeability silts and clays. The main body of groundwater located deep beneath the project area is the Gardena-Gage aquifer. To date, no groundwater monitoring data has indicated any impacts to the underlying Gardena-Gage aquifer.

PROJECT LOCATION & SETTING

The proposed project would be located in an industrial area in the City of Torrance, in the County of Los Angeles. The existing 37-acre Torrance Distribution Facility is located at 19500 Mariner Avenue (Assessor's Parcel Number: 7352-001-

030) and is owned by the Union Carbide Corporation (UCC), a wholly owned subsidiary of The Dow Chemical Company. The project site consists of a 13.8-acre area within the southeastern portion of the larger facility.

UCC operated the 37-acre Torrance Distribution Facility as a terminal and distribution center. The facility was built in 1956 for polyethylene manufacturing. Also included was ethylene glycol production, blending, canning and distribution operations, and a chemical and plastics receiving and distribution operation. The glycol production unit was demolished in 1969. The facility served predominately as a polyethylene and ethylene glycol (anti-freeze) manufacturing facility from 1956 until 1982 when manufacturing operations were discontinued and much of the facility was decommissioned, sold, and redeveloped. The ethylene glycol blending, canning, and distribution operation was sold and is still in operation by the current owner. The remainder of the facility currently consists of a mostly inactive terminal and distribution center. Portions of the facility are leased to the ethylene glycol blending, canning, and distribution operator for storage of ethylene glycol. This operation also stores pallets of new anti-freeze. Other portions of the facility are leased to a local automotive dealership for storage of dealership inventory.

The 13.8-acre project site is accessed via Mariner Avenue and a private roadway, or the Burlington Northern and Santa Fe (BNSF) Railway Company railroad spur, which is located within the western boundary of the project site. A majority of the project site is covered with impervious surfaces (i.e., paved areas), with a smaller amount of area covered with gravel. The project site is divided into four Areas for the implementation of the RAP (see Figure 1).

The 0.8-acre Area 1 is located in the easternmost corner of the project site. This is the smallest of the four Areas and currently includes a decommissioned Heil Separator formerly used for the separation of oil and water associated with ethylene production, surrounding bushes and other small vegetation, and a segment of BNSF Railway Company railroad spur.

The 4.8-acre Area 2 is located in the central and northern portion of the project site, and includes vehicle storage for local automotive dealerships, small accessory buildings, a large above ground storage tank (Tank 26), and a small above ground storage tank.

The 2.4-acre Area 3 is located in the central and southwestern portion of the project site and includes storage areas and a segment of BNSF Railway Company railroad spur.

The 5.8-acre Area 4 is located in the central and southeastern portion of the project site, and includes two large and one small aboveground storage tanks, vehicle storage for local automotive dealerships, small accessory buildings, storage areas, and a segment of BNSF Railway Company railroad spur.

In addition to the four Areas, the project site is also divided into two large “parcels” (see Figure 1). Parcel B encompasses the northern half of the project site, including all of Area 1 and Area 2, as well as small segments of the northern portions of Area 3 and Area 4. Parcel C encompasses the southern half of the project site, including a majority of Area 3 and Area 4. There are three petroleum pipelines located in an easement running north-south across the western edge of Parcels B and C.

The perched zone groundwater beneath the project site is typically encountered at depths of approximately 50 feet to 60 feet below ground surface (bgs). This perched or separated zone of groundwater is shallower than the deeper underlying Garden-Gage aquifer groundwater, which is typically encountered at depths of approximately 80 feet to 90 feet bgs.

The project site is generally bound by Mariner Avenue, a private roadway, other portions of the distribution facility, and other manufacturing, industrial, and office uses to the west; the BNSF Railway Company railroad right-of-way on the north and northeast; an approximately 50-foot-deep City of Torrance unlined stormwater basin on the east and south; a storage facility and the Pioneer Avenue cul-de-sac on the east; and office buildings and a surface parking lot on the south. Groundwater monitoring has shown the city-owned stormwater basin to have an effect on the perched groundwater beneath the project site and larger facility. The project site is nearly fully fenced off from the public and can be accessed by workers via Mariner Avenue and the private roadway on the west.

According to the Los Angeles County Department of Regional Planning land use map, the existing UCC Torrance facility, including the proposed project site, is designated as Industrial use. Areas adjacent to the proposed project site are designated as Industrial use to the north, east, south, and west, with the exception of one parcel designated as Commercial use to the west.

At a local level, according to the City of Torrance General Plan, the proposed project site is designated as “I-BP” (Business Park); land uses adjacent to the proposed project site are designated I-BP to the north, “I-LT” (Light Industrial) to the east, “PUB” (Public/Quasi-Public/Open Space) to the southeast, and I-BP to the south and west. The proposed project site is zoned as “M2” (Heavy Manufacturing), as are all adjacent parcels. The BNSF railroad right-of-way is immediately north and east of the project site. Also, to the east is the City of Torrance stormwater retention basin, and to the southeast is a storage warehouse and parking lot. To the south and west are various manufacturing and commercial properties.

PROJECT BACKGROUND

Prior investigative work at the project site identified components of Dripolene as the constituents of potential concern associated with the decommissioned Heil Separator (Area 1). Dripolene is a pyrolysis fuel oil-water emulsion liquid (i.e., a waste sludge) that was generated along with quench water during the thermal cracking process to produce ethylene for polyethylene production and during the compression of ethylene gas in the polyethylene manufacturing process. Area 1 was utilized for the separation of the Dripolene from the quench water. Water effluent from this oil-water separator drained continuously to the county sewer trunk line, which discharged to the publicly owned treatment works. Oil (Dripolene) and sludges were recovered, stored in on-site aboveground storage tanks, and periodically pumped out for off-site disposal. Dripolene was produced in Area 1 from 1971 (when the facility upgraded its wastewater collection and treatment system) until 1982 (when manufacturing was discontinued). A subsequent Remedial Investigation (RI) indicated that a release of Dripolene had occurred in Area 1. From the RI, individual constituents of potential concern at the site, which are components of Dripolene, were identified to include select volatile organic compounds (VOCs), semi-volatile organic compounds, and DNAPL within soil and perched groundwater beneath the site. Deeper groundwater located within the Gardena-Gage aquifer has not been impacted by Dripolene but has been found to contain VOCs consistent with regional plume contaminants.

Environmental investigation and remediation activities have been performed at the project site and larger facility since 1972. Activities performed since 2000 are briefly summarized below. Further technical information can be found within the RAP and the DTSC's EnviroStor database report of the project site.

After completion of the RI in 2000 and a Baseline Human Health Risk Assessment (HHRA) in 2002, a Focused Feasibility Study was completed to evaluate potential remedial alternatives for the Heil Separator area (Area 1). The feasibility study recommended selection of a deed restriction, enhanced DNAPL recovery, and monitored natural attenuation (MNA) or other in-situ technologies as the most appropriate remediation approach for the Heil Separator area. Based on the recommendations in the feasibility study, a Remedial Action Work Plan for the Heil Separator area was prepared under the oversight of DTSC and was finalized and approved on July 1, 2004. UCC began implementation of the tasks described in the Remedial Action Work Plan shortly after its approval, including groundwater monitoring, pilot testing of an automated DNAPL recovery system, and cone penetration test borings and installation of an additional perched zone groundwater monitoring well.

UCC completed an *Additional Site Assessment Work Plan* dated November 13, 2008, which included the completion of a soil vapor assessment, membrane interface probe assessments, and a laser-induced fluorescence assessment. The results suggested that possible source areas for VOCs, primarily benzene, are located beneath the project site at a depth from approximately 15 to 22 bgs. Results also showed that subsurface impacts begin at approximately 10 to 12 feet bgs, suggesting a release from a subsurface feature rather than a surface release.

UCC subsequently prepared the *Revised Final - 2011 Additional Site Assessment Work Plan* dated March 31, 2011. UCC completed implementation of the 2011 work plan in January 2013. Soil sampling for background metals analysis (minus arsenic) was conducted and an additional groundwater monitoring well was established.

UCC next prepared the *Revised 2013 Site Assessment Work Plan*. UCC completed implementation of the scope of work outlined in the Work Plan as of March 31, 2015. Results of this work were submitted to DTSC in the *2015 Site Assessment Summary Report and Human Health Risk Assessment (HHRA)*. Nine soil vapor probe sets and thirteen groundwater monitoring wells (ten in the perched zone and three in the Garden-Gage aquifer) were installed.

The HHRA evaluated potential health risk to current and future human receptors at Areas 1, 2, 3, and 4 in Parcels B and C at the project site. Recommendations from the HHRA stated that: 1) Clean-up (remediation) goals be calculated to be protective of commercial/industrial workers for arsenic in Soil; 2) land use and institutional controls (such as landscaping, covering with clean fill, or paving) may cut off the exposure pathways to soil for the future on-site commercial/industrial worker; and 3) require a health and safety plan or similar document to protect construction/excavation worker exposures to soil and soil vapor in the event of site redevelopment or soil intrusive excavations.

In accordance with the recommendations presented in the 2016 Five-Year Review Report two additional perched zone groundwater monitoring wells and a soil vapor probe set were installed.

In 2017, an assessment of the biogeochemical conditions in the saturated zone and the unsaturated zone of the site was completed to determine whether biodegradation was occurring. As a result, vapor monitoring wells and additional groundwater monitoring wells were installed.

UCC has completed a total of 23 additional groundwater sampling events since 2006, and groundwater monitoring continues to be performed on a semi-annual basis. Groundwater samples are analyzed for VOCs, semi-volatile organic compounds, and total petroleum hydrocarbons. The results of each sampling event were reported to DTSC.

The perched zone groundwater is typically encountered at depths of approximately 50 feet to 60 feet bgs. The City of Torrance Stormwater Basin located adjacent to the east and south of the project site affects the groundwater level and flow direction of the perched zone groundwater. The perched zone appears to pinch out to the west of the project site. The primary constituents in the perched zone groundwater are benzene and naphthalene. The naphthalene appears to originate primarily from the DNAPL beneath the Heil Separator, located on the east side of the project site. Analysis of a sample of the DNAPL collected from beneath the Heil Separator area showed it to be 49 percent naphthalene, but only 0.8 percent benzene. The source of the benzene is less clear. The low percentage of benzene in the DNAPL does not appear to be sufficient to account for the benzene plume observed in the perched zone groundwater. Some of the benzene may have originated from the Torrance Refinery located just to the east of the project site, east of the BNSF Railway Company right-of-way. In addition, there are three petroleum pipelines located in an easement running north-south across the western edge of Parcels B and C, and results of groundwater monitoring appears to indicate two benzene “hot spots” centered on this pipeline easement.

The Garden-Gage aquifer groundwater is typically encountered at depths of approximately 80 feet to 90 feet bgs. The perched zone and Gardena-Gage aquifer are separated by a layer of lower permeability silt and clay. Benzene and naphthalene have not been detected in samples of the Gardena-Gage groundwater collected to date.

PROJECT OBJECTIVES

The objectives of the proposed project are to:

- To develop and implement remediation at the project site to reduce the concentrations of contaminants of concern in soil, soil gas, and groundwater to levels that are protective to human health and the environment; and
- To implement remediation activities that are consistent with the current and anticipated future commercial and/or industrial worker uses of the property.

PROJECT CHARACTERISTICS

The former UCC Torrance Distribution Facility RAP (proposed project) details the steps to be taken in the implementation of the selected remedial response actions at the project site in order to improve environmental conditions. The RAP would be implemented under the terms of UCC’s Voluntary Cleanup Agreement with DTSC and would include a combination of various remedial activities in each of the four Areas of the project site, as described below and summarized in Table 1.

Table 1: Summary of Proposed Remediation Activities in Each Area

Remediation Activity Proposed					
Area	In-Situ Geochemical Stabilization ¹	Soil Vapor Extraction ²	Excavation and Disposal of Soils ³	Restrictive Land Use Covenants ⁴	Long-Term Natural Attenuation ⁵
1	X			X	X
2		X	X	X	X
3		X		X	X
4			X	X	

Definitions:

¹ In-Situ Geochemical Stabilization (ISGS): Stabilizing contaminants in place.

² Soil Vapor Extraction (SVE): In-situ (in place) soil venting or vacuum extraction based on the transfer of contaminant from the solid and/or liquid phases the gas phase, with subsequent collection of the gas at extraction wells.

³ Excavation and Disposal of Soils: Digging up contaminated soils and transferring soils off-site to qualified disposal facility via trucks.

⁴ Restrictive Land Use Covenants: Legal agreement recorded on the property to assure that it is not used for residential or other sensitive receptor purposes in the future.

⁵ Long-Term Natural Attenuation: relies on natural processes such as biodegradation, dispersion, dilution, volatilization, hydrolysis, sorption and chemical or biological transformation to attenuate the constituents of potential concern and achieve the established corrective action objectives.

Proposed In-Situ Geochemical Stabilization to Remediate Dripolene - Area 1

Environmental conditions requiring remediation in Area 1 consist of Dripolene (DNAPL) releases to soil and perched zone groundwater. Dripolene is a pyrolysis fuel oil-water emulsion liquid that was generated along with quench water during the thermal cracking process for ethylene production. Area 1, encompassing the decommissioned Heil Separator, located UCC Torrance RAP Draft IS/ND – July 2021

in the eastern portion of the project site was previously utilized for the separation of the dripolene from the quench water. Current soil and groundwater data suggest that DNAPL is present in the subsurface beneath the Area 1 in and around the Heil Separator and that the DNAPL impacts are also likely impacting downgradient groundwater with elevated levels of naphthalene. Therefore, addressing Area 1 would not only mitigate the mobility of DNAPL in the subsurface but serve to reduce downgradient dissolved groundwater impacts and enhance the effectiveness of the ongoing natural attenuation of naphthalene.

The primary remedial action proposed to be implemented in Area 1 is in-situ geochemical stabilization (ISGS) in the area of the decommissioned Heil Separator in order to mitigate DNAPL impacts through the immobilization/sequestration of mobile DNAPL and the reduction of mass flux from the DNAPL into the dissolved phase. The implementation of ISGS would involve the emplacement of a permanganate-based amendment designed to promote the development of a mineral coating around the DNAPL in order to 1) immobilize and mitigate the dissolution of contaminants from the DNAPL; 2) reduce the subsurface permeability and subsequent mass flux of dissolved phase groundwater impacts; and 3) provide for ongoing natural attenuation processes to act on the downgradient naphthalene impacts.

The implementation of ISGS would essentially constrain the current observed impacts to the on-site property, potentially enhance the downgradient natural attenuation of naphthalene, and provide for the protection of human health and the environment. Other components of the proposed remediation activities in Area 1 include the establishment of institutional controls in the form of restrictive land use covenants, and incorporation of monitored natural attenuation to evaluate the ongoing natural attenuation processes that have been demonstrated in the subsurface within the perched zone groundwater downgradient of the decommissioned Heil Separator.

Proposed Soil Vapor Extraction to Remediate Benzene - Area 2 and Area 3

Environmental conditions requiring remediation in Area 2 and Area 3 consist of benzene plumes in the perched zone groundwater centered on monitoring well MW-17 in Area 2 and monitoring well MW-25 in Area 3 (see Figure 2). Although the source of the benzene plumes has not been fully determined, the observed plumes coincide with a petroleum pipeline easement running north-south across the project site.

The primary remedial action proposed to be implemented in Area 3 consists of soil vapor extraction (SVE) in the western-central portion of Parcel C to mitigate the potential vapor intrusion and/or off-site dissolved phase benzene groundwater impacts. The implementation of this component would initially be a pilot demonstration using a segmented horizontal well to target focused areas of benzene impacts in the unsaturated and saturated zone. Area 3 was selected as the pilot area because the benzene impacts are more limited than in Area 2. The Area 3 SVE system would also constrain the current observed impacts to the on-site property and enhance the protection of human health and the environment. The proposed SVE in Area 2 would be implemented in the western-central portion of Parcel B. The implementation of this component in Area 2 would be refined based on the pilot demonstration SVE system in Area 3. Area 2 would likely require multiple horizontal wells. As such, the data from the Area 3 pilot demonstration would be used to develop this full-scale application, should it be warranted. The Area 2 SVE system would be designed to essentially constrain the current observed impacts to the on-site property and enhance the protection of human health and the environment. In both Areas 2 and 3, the implemented remedy would also include the establishment of institutional controls, through restrictive land use covenants, and long-term natural attenuation to manage the benzene impacts in the perched zone groundwater downgradient of the project site.

Proposed Excavation and Disposal to Remediate Arsenic Soils and Naphthalene Soils - Area 2 and Area 4 (respectively)

Environmental conditions requiring remediation in Area 2 also consists of arsenic levels above its target cleanup goal in shallow soil. In Area 2, remediation would consist of the excavation and disposal for the arsenic-impacted soils, as well as the establishment of institutional controls, through restrictive land use covenants.

Similar to Area 2, environmental conditions requiring remediation in Area 4 consist of naphthalene levels above its target cleanup goal in shallow soil. In Area 4, remediation would also consist of excavation and disposal for the limited volume of naphthalene-impacted soil and the establishment of institutional controls, through restrictive land use covenants.

Institutional controls, primarily in the form of land use covenants (LUCs), would be a component of the remedial action for the project site. Developed LUCs would be recorded on the property to assure that it is not used for residential or other sensitive receptor purposes in the future. Institutional control in the form of long-term natural attenuation would accompany remediation activities at Area 1, Area 2, and Area 3. This form of control relies on natural processes such as biodegradation, dispersion, dilution, volatilization, hydrolysis, sorption and chemical or biological transformation to

attenuate the constituents of potential concern and achieve the established corrective action objectives, and measures the success of the prior in-situ and SVE activities.

Operation and Maintenance Activities

Once remediation activities are completed minor operation and maintenance activities would occur related to the installed SVE system. These activities would require approximately one technician to visit the project site once per week on average.

CONSTRUCTION SCENARIO

Construction of the entire proposed RAP is expected to last for approximately 16 months, with the activities staggered into approximately 6 phases including initial excavations and installations, ongoing site activity related to operation and maintenance of the pilot system, additional investigations, possible expansions, and work plans associated with the SVE and ISGS remedies that would occur during that time period. The phases and respective anticipated timeframes are described below. The phases and timeframes described are preliminary and are estimated only for purposes of the environmental analysis.

Phase I

The first phase is anticipated to begin in approximately the third quarter 2021. This phase will include shallow soil excavations and pre-design investigations for the SVE pilot system. It is anticipated that this phase will take approximately two weeks to complete. For excavation, approximately five to eight construction workers would be on site each day.

Phase II

This phase would begin in approximately the fourth quarter of 2021 and would include the installation of the SVE pilot system in Area 3. It is anticipated that this phase would take approximately two months to complete. The installation would overlap with developing the implementation workplan for the ISGS component, including additional investigations. For the SVE pilot testing, approximately three to four construction workers per day would be required for well installation, with approximately six to eight workers required for the system installation.

Phase III and Phase IV

Phase III would begin during approximately the first quarter of 2022 and continue into Phase IV during approximately the second quarter of 2022. These phases would involve the operation of the SVE pilot system and the completion of permitting for ISGS. It is anticipated that these phases would take approximately six months to complete.

Phase V

This phase would take place during approximately the third quarter of 2022 and would involve the implementation of the ISGS remedy. Pending results from the pilot tests, this phase could overlap with the potential design of a full SVE system. For the ISGS implementation, approximately five to eight construction workers per day would be required for installation.

Phase VI

The final phase would take place during approximately the fourth quarter of 2022. This phase would include the installation of the SVE system in Area 2. It is anticipated that this phase would take approximately two months to complete and would require approximately three to four construction workers per day for well installation, with approximately six to eight workers required for the system installation.

The anticipated number of equipment is approximately 15 pieces. The anticipated types of equipment would include track-mounted excavator, rubber tire loader, end dump transport truck, vehicle-mounted direct-push drill rig, hollow-stem auger drill rig, cement-mixing truck, fork-lift, and mixing trailer. It is expected that most of the equipment would be mobilized to the project at the start of each phase and would remain on site for most of the project duration, which would minimize daily travel to and from the site.

An estimated 15 to 18 total haul truck trips are anticipated. The estimated total excavation would be approximately 150 cubic yards, with a maximum depth of 3 feet at Area 1 and 7.4 feet at Area 4.

The proposed haul route from the project site to Clean Harbors' Landfill in Buttonwillow is as follows: trucks shall exit the project site from the western gate along Mariner Avenue; travel south on Mariner Avenue toward Del Amo Boulevard; turn left onto Prairie Avenue then turn left onto Redondo Beach Boulevard; turn right to merge onto Interstate 405 (I-405) North and in 32 miles merge onto Interstate 5 (I-5) North; in 98.6 miles take exit 257 and turn right onto Tracy Avenue, then right onto California State Route (CA-58) West, then right onto Lokern Road, then turn right onto Delfern Road to enter the landfill.

Construction activities would occur Monday through Friday between 7:00 a.m. and 5:00 p.m., Monday through Friday. Weekend work is not anticipated. In addition, street closures and tree removal are not anticipated.

Soil Management

If the impacted soils are profiled prior to being excavated, based on existing analytical data, they will be directly loaded into the transport trucks. Otherwise, the impacted soils will be stockpiled on plastic at a designated location on the project site and, once profiled, will then be loaded into the transport trucks for disposal at the selected disposal facility. The contractor will be given the option to propose alternative ways of excavating and handling the impacted soils but will seek concurrence from AECOM before implementation.

If excavated soils are stockpiled, they will be handled as follows:

- The temporary stockpiles will be placed on plastic sheeting (6 millimeters) and kept moist during working hours and covered with plastic sheeting at the end of the day to control dust. Naphthalene-contaminated stockpiles will be placed on plastic sheeting and immediately covered with plastic sheeting. The edges of the plastic will have an overlap of at least 24 inches. The plastic will be secured at the base of the stockpile and along the seams of overlapping plastic sheeting with sandbags or equivalent means. The stockpiles will remain covered until load-out.
- Daily inspection of the stockpiles will be conducted to verify the integrity of stockpile cover. Any gaps, tears, or other deficiencies will be corrected immediately. Daily records will be kept of stockpile inspections and any repairs made.
- During stockpile generation and removal, only the working face of the stockpile will be uncovered.

Trucks may be loaded directly from the excavation or from temporary stockpiles, based on truck availability. When loading trucks, the equipment operator will minimize drop heights and resulting dust generation. Water will be used during loading operations, as necessary, to control fugitive dust emissions.

Trucks will be routed, and the stockpile areas will be located so as to avoid having trucks pass through impacted areas. The transport truck loads will be wetted and tarped prior to exiting the project site. All soil hauled from the site will comply with the following:

- Materials will be transported to an approved treatment/disposal facility.
- No excavated material may extend above the sides or rear of the truck/trailer.
- Prior to covering/tarped, the surface of the loaded impacted soil will be moistened.
- Trucks/trailers carrying impacted soils will be completely tarped/covered to prevent particulate emissions to the atmosphere.
- The exterior of the trucks/trailers shall be inspected and cleaned off, if needed, prior to leaving the project site to eliminate tracking of material offsite.

The contractor will implement a fugitive dust suppression and air monitoring program. The primary purpose of the dust suppression and air monitoring program will be to monitor the level of particulates in the air at and near the project site during remedial activities; and, based on the levels, adjust dust suppression measures to minimize the dust generated during the work. The selected remedy will follow South Coast Air Quality Management District (SCAQMD) regulations for fugitive dust control and be protective of human health and the environment by reducing the potential for exposure to the constituents of potential concern in soil. Potential dust control measures include:

- Dust suppression will be performed by lightly spraying or misting the active work areas and other points of dust generation with water, as needed. Water mist may also be used on soil placed in the transport trucks.
- Temporary soil stockpiles will be kept moist during working hours and covered with plastic sheeting at the end of the day to control dust. The stockpiles will remain covered until loadout.
- Efforts will be made to minimize the soil drop height from the loader bucket into the transport trucks.

- Work will be stopped when wind gusts exceed approximately 25 miles per hour. After the soil is loaded into the transport trucks, the soil will be covered to prevent soil from blowing or spilling out of the truck during transport to the disposal facility.
- While on the property, all vehicles will maintain slow speeds (i.e., less than 5 miles per hour) for safety purposes and for dust control measures.
- Daily wet-sweeping of paved access roads, parking areas, or staging areas.
- Daily wet-sweeping public streets if visible soil material is carried from the project site.
- Limiting traffic speeds on unpaved roads to 15 miles per hour.
- Covering and protecting with wattles loose stockpiled construction materials (including clean soil) that are not being actively used against rain and wind. Active use is defined as materials that are scheduled for use within 14 days.
- Posting a publicly visible sign with the project contact name and telephone number for dust complaints. This person shall respond and take corrective action within 48 hours. The SCAQMD phone number shall also be visible to ensure compliance with applicable regulations.
- Performing air monitoring as described in this plan.
- Prior to exiting the site, the transport truck drivers will be required to stop and inspect the tires and sides of their trucks for loose soil debris. Extra soil will be removed using a wire brush or broom as deemed appropriate. This cleanup/decontamination area will be setup as close to the loading area as possible to minimize spreading the impacted soil.
- Haul trucks transporting contaminated soils offsite will be tarped before leaving the project site.
- Site runoff generated by application of water for dust control shall be minimized and controlled according to the SWPPP.

In addition to controlling fugitive dust, the measures listed above will assist in controlling vapors and odors potentially emanating from the stockpiles. If necessary, further measures to control odor and vapor may include:

- Adding a non-toxic commercial suppressant (i.e., Simple Green®) to the dust control water spray. Foam suppressant may also be used as necessary to control vapors and odors.
- Minimizing unnecessary movement or agitation of the soil that may cause the uncontrolled evaporation of VOCs into the atmosphere, including the reshaping or relocation of stockpiles.
- At the end of each working day, all stockpiles shall be completely covered and securely anchored to prevent any exposure of soil to the atmosphere. Vapor monitoring, discussed further below, will be conducted in accordance with the Rule 1166 Various Locations Soil Mitigation Plan and the Health and Safety Plan (HASP). Odors will be monitored using worker perception.

Environmental Monitoring

Airborne dust monitoring will be conducted by AECOM to verify dust suppression activities and document that the loading activities are being done in accordance with SCAQMD Rule 403 (fugitive dust). The monitoring will be conducted using a portable hand-held dust monitor. Fugitive dust control measures will be implemented at the site to mitigate offsite dust migration onto neighboring properties through light watering of the active work areas throughout the load-out activities. Air monitoring for dust will be performed in the worker's breathing zone, in the general work area, and at designated areas along the perimeter upwind and downwind of the work area. During soil handling activities, dust monitoring will be conducted in each area approximately every 30 minutes, or more often if visible dust is observed, using a hand-held dust meter.

In addition to dust monitoring, organic vapor monitoring will be conducted in accordance with the RAP, and the site-specific HASP and SCAQMD Rule 1166 requirements. Upon detection of VOC-contaminated soil (photo ionization detector readings of 50 ppm or greater as hexane), the SCAQMD will be notified by the contractor within 24 hours of the first detection of VOC contamination, as required by Rule 1166. If photo ionization detector readings exceed 1,000 parts per million (ppm) as hexane, the SCAQMD will be notified immediately (within one hour) of the first detection, as required by Rule 1166.

Health and safety monitoring for remediation construction workers will consist of both dust monitoring and organic vapor monitoring in the breathing zone in accordance with the provisions contained in the HASP.

PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED: (e.g., State Agencies, Counties, Cities, or Air Quality Districts, granting permits, financing approval, or participation agreement.)

- State of California Department of Toxic Substances Control
- State of California Water Resources Control Board
- City of Torrance
- South Coast Air Quality Management District

NATIVE AMERICAN CONSULTATION: Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.

In accordance with Assembly Bill 52, DTSC has contacted potentially interested Native American tribal representatives in the project area in order to inform them of the proposed project and to request input on the potential cultural sensitivity of the project area. A review of the Sacred Lands File search, according to the Native American Heritage Commission (NAHC) (requested November 13, 2020 by DTSC Tribal Affairs) returned *negative* results (December 16, 2020) for the immediate area of the project site. The NAHC also provided a list of eight Native American contacts representing the different Tribal groups historically and culturally affiliated with the geographic area of the site. The Office of Environmental Equity – Tribal Affairs sent Tribal engagement letters (February 3, 2021) to the eight identified contacts providing detailed information on the proposed remedial activities associated with the site. DTSC Tribal Affairs received no response regarding interest or concerns associated with the project.

Note: Please see the Tribal Cultural Resources Section (Section 18) for additional information.

TABLE OF CONTENTS

PROJECT INFORMATION	1
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	11
DETERMINATION	11
CERTIFICATION	11
EVALUATION OF ENVIRONMENTAL IMPACTS	12
ENVIRONMENTAL IMPACT ANALYSIS	13
1. AESTHETICS.....	13
2. AGRICULTURE AND FORESTRY RESOURCES	16
3. AIR QUALITY.....	19
4. BIOLOGICAL RESOURCES.....	28
5. CULTURAL RESOURCES	36
6. ENERGY	40
7. GEOLOGY AND SOILS	43
8. GREENHOUSE GAS EMISSIONS.....	47
9. HAZARDS AND HAZARDOUS MATERIALS	51
10. HYDROLOGY AND WATER QUALITY	55
11. LAND USE AND PLANNING	60
12. MINERAL RESOURCES	62
13. NOISE.....	64
14. POPULATION AND HOUSING.....	66
15. PUBLIC SERVICES	68
16. RECREATION	70
17. TRANSPORTATION.....	72
18. TRIBAL CULTURAL RESOURCES.....	76
19. UTILITIES AND SERVICE SYSTEMS	79
20. WILDFIRE.....	82
21. MANDATORY FINDINGS OF SIGNIFICANCE.....	84
REFERENCES LIST	85

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan

APPENDICES

A	AIR QUALITY, GREENHOUSE GAS, AND ENERGY MODELING OUTPUTS
B	BIOLOGICAL RESOURCES DATABASE OUTPUT
C	CULTURAL RESOURCES RECORDS SEARCH RESULTS (CONFIDENTIAL)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist beginning on page 14. Please see the checklist beginning on page 14 for additional information.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input type="checkbox"/>	Geology/Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials
<input type="checkbox"/>	Hydrology/Water Quality	<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Wildfire	<input type="checkbox"/>	Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

<input checked="" type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CERTIFICATION

I hereby certify that the statements furnished above and in the attached documentation, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Joe Hwong
Signature

July 6, 2021
Date

Joe Hwong, P.G., C.H.G.
Name

DTSC Project Manager
Title

714-484-5449
Phone #

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

ENVIRONMENTAL IMPACT ANALYSIS

1. AESTHETICS				
Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

State

- Scenic Highways Program:** California’s Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler’s enjoyment of the view. The California Department of Transportation (Caltrans) defines a State Scenic Highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality.

ENVIRONMENTAL SETTING (BASELINE):

The project site consists of 13.8 acres within the UCC Torrance facility grounds, a level, approximately 37-acre property located at 19500 Mariner Avenue in Torrance, California. The site is accessed via Mariner Avenue and a private roadway, or the BNSF Railway Company rail spur. There are no officially designated State Scenic Highways in the project area.

The project site is within a generally developed, industrial area surrounded by facilities used for manufacturing, distribution, and storage, as well as commercial uses and accessory parking. A large, approximately 50-foot deep, unlined stormwater basin owned by the City of Torrance is also located to the east of the project site, just south of the site’s Heil Separator. Collectively, the project site and surrounding properties are industrial in appearance, with minimal landscaping. There are no aesthetic resources within view of the project site.

Approximately 80 percent of the UCC Torrance facility is developed with buildings, roads, and paved areas. The remaining approximately 20 percent is generally covered with gravel. It is comprised of several single-story buildings and a number of aboveground storage tanks (ASTs) located on the property. In addition, there is a decommissioned oil-water separator (the Heil Separator) located on the east side of the facility, along with a concrete-lined stormwater basin. Portions of the facility are owned by an ethylene glycol blending, canning, and distribution operation, with additional space leased to the operation owner for the storage of ethylene glycol. Other portions of the facility are leased to a local automotive dealership for storage of dealership inventory. Remaining portions consist of an inactive terminal and distribution center owned by Hager Pacific Group. The project site is nearly fully fenced off from the public.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

Aesthetics, or visual resources, are the natural and cultural features of the landscape that can be seen and that contribute to the public's appreciative enjoyment of the environment. Visual resource or aesthetic impacts are generally defined in terms of a project's physical characteristics and potential visibility, light, and glare and the extent to which the project's presence would change the perceived visual character and quality of the environment in which it would be located.

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to aesthetic resources if it would:

- Have a substantial change in the overall visual character or quality has an adverse effect on viewer response.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Conflict with applicable zoning and other regulations governing scenic quality.
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No environmental studies were performed for this resource. Readily available information was reviewed for this assessment. Environmental investigation and remediation activities have been performed since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect on a scenic vista?

Impact Analysis: With the exception of construction equipment, the presence of which would be short-term, there are no new aboveground elements proposed by the project. New wells affiliated with proposed corrective action technologies, including SVE, would be constructed similar to existing wells and would be underground. Construction activity affiliated with excavation and disposal of soil would be temporary. Operation of the proposed project would be limited to the presence of project personnel for on-site testing and monitoring of various corrective action technologies. The project site is in a level, developed, industrial area and no official or designated scenic vistas or viewpoints are located in the project area. The project site is nearly fully fenced off from the public. The construction and operation of the proposed project would not be a part of a scenic vista.

Conclusion: No Impact.

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis: The proposed project is not located within a state scenic highway, and therefore would not damage any scenic resources, including trees, rock outcroppings, historical buildings along such a highway. Any vegetation and/or trees impacted during construction of the proposed project would be replaced as feasible, however tree removal is not anticipated. The proposed project would not substantially damage scenic resources.

Conclusion: No Impact.

- c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis: Project activities associated with the proposed RAP do not have the potential to degrade the existing visual character of the site or its surroundings. With the exception of construction equipment, the presence of which would be short-term, there are no new aboveground elements proposed by the project. The existing view in the direction of the project site and the surrounding area is of a developed, industrial area which is not considered of high visual quality. The visual character of the proposed project would be visually compatible with existing environment, as such, viewers would have a low sensitivity to any visual changes resulting from the proposed project. The proposed project would not conflict with applicable zoning and other regulations governing scenic quality or visual character.

Conclusion: No Impact.

- d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Impact Analysis: The proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Nighttime construction activities are not required with the proposed project, as such, nighttime construction lighting would not occur. The project does not propose to install new sources of light or glare, and operation of the RAP would not require the use of light that exceeds existing conditions. Light-sensitive land uses, such as residential uses, would not be significantly affected as the project site is surrounded by similar industrial and commercial uses.

Conclusion: No Impact.

References Used: 2, 12

2. AGRICULTURE AND FORESTRY RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal

- **Farmland Protection Policy Act:** The U.S. Department of Agriculture (USDA) administers the Farmland Protection Policy Act of 1981. The act is intended to minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses. The act also requires these programs to be compatible with state, local, and private efforts to protect farmland.

State

- **California Civil Code Section 3482.5 (Right to Farm Act):** The Right to Farm Act is designed to protect commercial agricultural operations from nuisance complaints that may arise when an agricultural operation is conducting business in a “manner consistent with proper and accepted customs.” The code specifies that established operations that have been in business for three or more years that were not nuisances at the time they began are not to be considered a nuisance as a result of a new land use.
- **California Land Conservation Act (Williamson Act):** The Williamson Act of 1965 was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby slowing its conversion to urban and suburban development. The program requires a 10-year contract between the county and the landowner. While in contract, the land is taxed on the basis of its agricultural use rather than its market value. The land becomes

subject to certain enforceable restrictions, and certain conditions need to be met prior to approval of an agreement. The goal of the Williamson Act is to protect agriculture and open space. The project site is not covered by Williamson Act or Farmland Security Zone contract. Therefore, no such contract aimed at retaining prime agricultural land and/or open space as agricultural use in order to slow its conversion to urban and suburban development affects the project site.

- **California Land Evaluation Site Assessment Model (LESA):** The USDA National Resources Conservation Service (NRCS) developed the LESA to assist state and local officials in making sound decisions regarding land use. Combined with forest measures and rangeland parameters, a LESA can provide a technical framework to numerically rank land parcels through local resource evaluation. In determining whether impacts to agricultural resources are significant environmental effects, the CEQA Guidelines reference the California Agricultural LESA Model prepared by the California Department of Conservation (DOC) as an optional methodology that may be used to assess the relative value of agriculture and farmland. The project site does not include existing agriculture or farmland.
- **Farmland Mapping and Monitoring Program (FMMP):** The FMMP, established in 1982, and implemented by and mapped by the California DOC, produces maps and statistical data used for analyzing impacts to the state's agricultural resources. Agricultural land is rated according to soil quality and irrigation status, with the best quality land called Prime Farmland. Maps are updated every two years, with current land use information gathered from aerial photographs, a computer mapping system, public review, and field reconnaissance. The minimum mapping unit is 10 acres. The DOC Prime Farmlands, Farmlands of Statewide Importance, and Unique Farmlands are referenced in CEQA Guidelines Appendix G as resources to consider in an evaluation of agricultural impacts. The project site does not include existing agriculture or farmland.

ENVIRONMENTAL SETTING (BASELINE):

The project site is within the UCC Torrance facility which is zoned "M2" (Heavy Manufacturing). Areas adjacent to the facility are also zoned M2. At a local level, according to the City of Torrance General Plan Land Use Policy, the project site is designated as "I-BP" (Business Park); land uses adjacent to the facility are designated I-BP to the north, "I-LT" (Light Industrial) to the east, "PUB" (Public/Quasi-Public/Open Space) to the southeast, I-BP to the south, and I-BP to the west. According to the County of Los Angeles land use designations, the project site is designated as Industrial. Areas adjacent to the facility are designated Industrial and Commercial.

The UCC Torrance facility was built in 1956 for polyethylene manufacturing and was originally owned by UCC. The facility occupied approximately 100 acres. It operated until 1982, when the manufacturing operations were discontinued and much of the facility was decommissioned. The project proposes to implement a RAP at the project site in order to improve environmental and human health. Construction of wells and the excavation and hauling of soil comprise the physical components of the project; such activities are a continuation of previously used corrective action technologies and monitoring practices at the project site. The project areas have not been mapped by the FMMP. No Williamson Act contracts exist within Los Angeles County. Neither farmlands nor areas zoned as forest land or timber land occur within the project site. Therefore, there is no impact and this topic is not evaluated further for the proposed project.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to agricultural and forestry resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).
- Result in the loss of forest land or conversion of forest land to non-forest use.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No environmental studies were performed for this resource. Readily available information was reviewed for this assessment. Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact Analysis: Not applicable.

Conclusion: No Impact.

- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Impact Analysis: Not applicable.

Conclusion: No Impact.

- c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Impact Analysis: Not applicable.

Conclusion: No Impact.

- d. Result in the loss of forest land or conversion of forest land to non-forest use?

Impact Analysis: Not applicable.

Conclusion: No Impact.

- e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses?

Impact Analysis: Not applicable.

Conclusion: No Impact.

References Used: 2, 7, 17, 18, 27

3. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The project site is located within the South Coast Air Basin (SCAB). The SCAB includes Orange County and portions of Los Angeles, Riverside, and San Bernardino counties. The SCAB is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east; and the San Diego County line to the south. Air quality in the SCAB is regulated at the federal level by U.S. Environmental Protection Agency (USEPA), at the state level by the California Air Resources Board (CARB), and at the local level by the South Coast Air Quality Management District (SCAQMD).

CARB is charged with reducing air pollution and protecting public health from the harmful effects of air pollution. CARB focuses on California's unique air quality challenges by setting the state's own stricter emissions standards for a range of statewide pollution sources including vehicles, fuels, and consumer products. California's 35 local air districts are responsible for regional air quality planning, monitoring, and stationary source and facility permitting. The districts administer air quality improvement grant programs and are CARB's primary partners in efforts to reduce air pollution.

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the USEPA and the CARB as being of concern both on a nationwide and statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); lead; and particulate matter (PM), which is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM₁₀) and PM equal to or less than 2.5 micrometers in diameter (PM_{2.5}). Because the air quality standards for these air pollutants are regulated using human health and environmentally based criteria, they are commonly referred to as "criteria air pollutants."

In addition to criteria air pollutants, USEPA and CARB regulate hazardous air pollutants, also known as toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., long-duration) and acute (i.e., severe but short-term) adverse effects on human health, including carcinogenic effects. TAC can be separated into carcinogens and noncarcinogens based on the nature of the effects associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts would not occur. Any exposure to a carcinogen poses some risk of contracting cancer. Noncarcinogens differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

Federal

- **Federal Clean Air Act and National Ambient Air Quality Standards:** National air quality policies are regulated through the Federal Clean Air Act (CAA). Pursuant to the CAA, the USEPA has established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare with an adequate margin of safety. The NAAQS represent safe levels of each criteria pollutant to avoid specific adverse effects to human health and the environment. Two types of NAAQS have been established, primary and secondary standards. Primary standards set limits to protect public health, especially that of sensitive populations such as asthmatics, children, and seniors. Secondary standards set limits to protect public welfare, including protections against decreased visibility and damage to animals, crops, and buildings.

The CAA was amended in 1977 to require each state to maintain a State Implementation Plan (SIP) for achieving compliance with the NAAQS. In 1990, the CAA was amended again to strengthen regulation of both stationary and motor vehicle emission sources. Conformity to the SIP is defined under the 1990 CAA amendments as conformity with the SIP's purpose in eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of these standards.

State

- **California Clean Air Act and California Ambient Air Quality Standards:** In 1988, the state legislature adopted the California CAA, which established a statewide air pollution control program and the California Ambient Air Quality Standards (CAAQS). The California CAA requires all air districts in the state to endeavor to meet CAAQS by the earliest practical date. Unlike the federal CAA, the California CAA does not set precise attainment deadlines. Instead, the California CAA establishes increasingly stringent requirements for areas that will require more time to achieve the standards. CAAQS are generally more stringent than NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride.
- **Attainment of Federal and State Air Quality Standards:** Areas are classified under the Federal CAA and California CAA as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the federal and state air quality standards have been achieved. With respect to the NAAQS, the SCAB is designated as a nonattainment area for ozone and PM_{2.5}, and as an attainment or unclassified area for all other pollutants. With respect to the CAAQS, the SCAB is designated as a nonattainment area for ozone, PM₁₀, and PM_{2.5}, and as an attainment area for all other pollutants (SCAQMD 2016).

Local

- **South Coast Air Quality Management District:** In the SCAB, the SCAQMD is the agency responsible for protecting public health and welfare through the administration of federal and state air quality laws and policies. Included in the SCAQMD's tasks are monitoring of air pollution, preparation of air quality plans, and promulgation of rules and regulations. Under the California CAA, the SCAQMD is required to develop an air quality attainment plan for nonattainment criteria pollutants within the air district. The most recent air quality plan developed by the SCAQMD is the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP is the legally enforceable blueprint for how the region will meet and maintain the NAAQS and CAAQS. The 2016 AQMP identifies strategies and control measures needed to achieve attainment of the 8-hour ozone standard and federal annual and 24-hour standard for PM_{2.5} in the SCAB (SCAQMD 2017).

SCAQMD rules relevant to the proposed project include, but are not limited to:

- Regulation IV: Prohibitions; Rule 401: Visible Emissions. Prohibits the generation of particulate matter emissions that exceed the visible emissions threshold.
- Regulation IV: Prohibitions; Rule 402: Nuisance. Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property.
- Regulation IV: Prohibitions; Rule 403: Fugitive Dust. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site.
- Regulation XI: Source Specific Standards; Rule 1166: Volatile Organic Compound (VOC) Emissions from Decontamination of Soil. Sets requirements to control the emissions VOCs from excavating, grading, handling and treating VOC-contaminated soil as a result of leakage from storage or transfer operations, accidental spillage, or other deposition.

The proposed project is required to comply with applicable rules, and conformance would be incorporated into project specifications and procedures, such as the Health and Safety Plan (HASP).

ENVIRONMENTAL SETTING (BASELINE):

The proposed project site is located in the City of Torrance within the SCAB. Ambient air pollutant concentrations in the SCAB are measured at air quality monitoring stations operated by CARB and the SCAQMD. The closest air quality monitoring station to the project site is the Long Beach-2425 Webster Street station, located approximately 8 miles southeast of the project site. Air quality monitoring data for ozone, CO, NO₂, and PM₁₀ were obtained from the SCAQMD Historical Data by Year tables for the Southwest Coastal Los Angeles County source receptor area (SRA 3). Data for PM_{2.5} were obtained from South Coastal Los Angeles County 1 source receptor area (SRA 4).

Table 3-1 presents 3 years of the most recent information available, summarizing the exceedances of standards and the highest recorded pollutant. These concentrations represent the existing, or baseline conditions, for the project area, based on the most recent information that is available.

**Table 3-1
Ambient Air Quality Summary**

Pollutant Standards	2017	2018	2019
Ozone			
Maximum 1-hour concentration (ppm)	0.086	0.074	0.082
Maximum 8-hour concentration (ppm)	0.070	0.065	0.067
<u>Number of Days Standard Exceeded</u>			
CAAQS 1-hour (>0.09 ppm)	0	0	0
CAAQS 8-hour (>0.070 ppm)/NAAQS 8-hour (>0.070 ppm)	0/0	0/0	0/0
Carbon Monoxide (CO)			
Maximum 8-hour concentration (ppm)	1.6	1.5	1.3
Maximum 1-hour concentration (ppm)	2.1	1.8	1.8
Nitrogen Dioxide (NO₂)			
Maximum 1-hour concentration (ppb)	72.2	59.6	56.6
Annual Average (ppb)	9.3	9.2	9.5
<u>Number of Days Standard Exceeded</u>			
NAAQS 1-hour	0	0	0
CAAQS 1-hour	0	0	0
Particulate Matter (PM₁₀)			
Maximum 24-hour concentration (µg/m ³)	46	45	62
Annual average concentration (µg/m ³)	19.8	20.5	19.2
<u>Measured Number of Days Standard Exceeded</u>			
NAAQS 24-hour (>150 µg/m ³)	0	0	0
CAAQS 24-hour (>50 µg/m ³)	0	0	2
Particulate Matter (PM_{2.5})			
Maximum 24-hour concentration (µg/m ³)	55.30	46.40	28.00
Annual average concentration (µg/m ³)	10.90	10.99	9.23
<u>Measured Number of Days Standard Exceeded</u>			
NAAQS 24-hour (>35 µg/m ³)	4	2	0

Notes: µg/m³ = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; ppb = parts per billion; ppm = parts per million
Source: SCAQMD 2020

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As stated in Appendix G of the CEQA Guidelines, the significance criteria established by the applicable air quality management board or air pollution control district may be relied on to make the impact determinations for specific program elements. The SCAQMD has established recommended screening level thresholds of significance for regional and localized pollutant emissions. The significance thresholds are shown in Tables 3-2 and 3-3.

Regional Thresholds

**Table 3-2
SCAQMD Air Quality Significance Thresholds
Mass Daily Thresholds ^a**

Pollutant	Construction	Operation
NO _x ¹	100 lbs/day	55 lbs/day
VOC ¹	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day

Notes: lbs/day = pounds per day

^a Source: SCAQMD 2019.

¹ Ozone is a secondary pollutant (i.e., ozone is not directly emitted, but results from chemical reactions in atmosphere from precursor pollutants (NO_x and VOC). As such, air quality impacts associated with ozone are evaluated using thresholds identified for its precursor pollutants.

The regional thresholds of significance were designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards, which were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. Because regional air quality standards have been established for these criteria pollutants to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution, these thresholds of significance can also be used to assess project emissions and inform the project's impacts to regional air quality and health risks under CEQA.

Localized Thresholds

Localized emissions of criteria air pollutants and precursors were assessed in accordance with SCAQMD's local significance thresholds (LST) guidance (SCAQMD 2008). The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. The Look-Up Tables provide thresholds for 1, 2, and 5-acre project sites. The project site is approximately 13.8 acres; however, the 5-acre project site threshold was utilized in order to provide a conservative analysis. The 5-acre project site threshold can be used as a conservative measure because it assumes daily emissions associated with the remediation activities are emitted on a 5-acre site (and therefore concentrated over a smaller area with higher air pollutant concentrations to the surrounding receptors). Thus, if emissions are less than the LSTs developed by SCAQMD for a 5-acre project, then a more detailed evaluation for a larger project site is not required. The project limits are located within Source Receptor Area 3 (Southwest Coastal Los Angeles County).

For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. The nearest sensitive receptors are multi-family residences located approximately 388 meters (1,272 feet) south of the project site. However, for conservative purposes the LST analysis was performed for the nearest hotel, located approximately 125 meters (410 feet) southeast of the project site. It should be noted that this is a conservative approach, as hotel stays are typically short in duration. Since workers in the surrounding commercial and industrial land uses could be present for periods of one to eight hours, the LST analysis was also performed for these worker receptors for pollutants with shorter averaging times, such as NO₂ and CO. The LSTs for NO₂ and CO were based on a 5-acre project site and 25-meter (82 feet) receptor distance.

The LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards. The LSTs are developed based on the ambient concentrations of that pollutant for each source receptor area. Since the LSTs consider the ambient air quality, LSTs can also be used to identify, based on mass emissions, those projects that would result in significant levels of air pollution and impact sensitive receptors. Table 3-3 presents the LSTs applicable to the proposed project.

**Table 3-3
SCAQMD Localized Significance Thresholds**

Threshold	NOx (lbs/day) ¹	CO (lbs/day) ¹	PM ₁₀ (lbs/day) ²	PM _{2.5} (lbs/day) ²
Construction	197	1,796	60	19
Operation	197	1,796	15	5

Notes:

¹ Threshold conservatively based on a 5-acre project site for Source Receptor Area 3 (Southwest Coastal Los Angeles County) for a 25-meter receptor distance.

² Threshold conservatively based on a 5-acre project site for Source Receptor Area 3 (Southwest Coastal Los Angeles County) for a 100-meter receptor distance.

NOx = nitrogen oxides; CO = carbon monoxide; PM₁₀ = particulate matter less than 10 micrometers in diameter; PM_{2.5} = particulate matter less than 2.5 micrometers in diameter

Source: SCAQMD 2008

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Construction emissions are short term or temporary but have the potential to result in a significant impact on air quality. Construction remediation activities would generate temporary emissions of precursors to ozone (VOC and NOx), CO, PM₁₀, and PM_{2.5}. VOC, NOx, and CO emissions are associated primarily with mobile equipment exhaust, including off-road construction equipment and on-road motor vehicles. Fugitive particulate matter dust emissions are associated primarily with site preparation and travel on unpaved roads and vary as a function of parameters such as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles.

Emissions generated by construction activities were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. This model allows the user to enter project-specific construction information, such as the types, number and horsepower of construction equipment, and the number and length of off-site motor vehicle trips. Construction emissions were estimated for worker commutes, haul trucks, and the use of off-road equipment. Emissions were calculated using the construction schedule, project specific equipment lists, and haul truck trips required by the Remedial Action Plan (RAP) activities.

Construction of the proposed project was assumed to begin in the third quarter of 2021 and involve a soil excavation phase, SVE pilot system construction, ISGS barrier construction, and SVE system expansion. The estimated construction workforce is a maximum of 8 workers per day. In addition, the proposed project anticipates approximately 150 cubic yards (CY) of impacted soil would be exported and approximately 200 CY of clean fill would be imported to the site. Impacted soils excavated from the project site are anticipated to be exported via haul truck to the Clean Harbors' Landfill in Buttonwillow. The analysis assumed an 85-mile truck trip length for the impacted soil haul truck trips based on the distance between the project site and the SCAQMD boundary. Additional modeling details and assumptions are provided in Appendix A.

Once construction remediation activities are complete, minor operation and maintenance activities would occur related to the installed SVE system. These activities would require one technician to visit the project site an average of once per week. Emissions associated with the weekly maintenance trips were estimated using CARB EMFAC2017 using default trip lengths and fleet mix for Los Angeles County. In addition, the SVE system would be housed on a portable skid-mounted frame and equipped with an electric vacuum blower (pump). It is anticipated that the electric blower will be powered using a 35-kilowatt diesel generator, operating 24 hours per day. Emissions associated with the diesel generator were also estimated using CalEEMod version 2016.3.2. Additional modeling details and assumptions are provided in Appendix A.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

a. Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis: Air quality plans describe the air pollution control strategies to be implemented by a city, county, or regional air district. As previously discussed, the 2016 AQMP is the applicable air quality plan in the SCAB. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the Southern California Association of Governments (SCAG), and the USEPA.

Consistency with the AQMP is determined through evaluation of whether the project would exceed the estimated emissions used as the basis of the AQMP, which are based, in part, on population projections developed by the SCAG. The SCAG forecasts are based on local general plans and other related documents, such as housing elements, that are used to develop population projections and traffic projections.

Implementation of the proposed project activities would involve the use of off-road equipment, haul trucks, and worker commute trips. Assumptions for off-road equipment emissions in air quality plans are developed based on hours of activity and equipment population reported to CARB for rule compliance. The use of construction equipment in the AQMP is estimated for the region on an annual basis, and construction-related emissions are estimated as an aggregate in the AQMP. Since project construction is limited to short-term activities and construction activities would not involve unusual characteristics that would necessitate the use of extensive off-road equipment usage, the proposed project would not increase the assumptions for off-road equipment use in the AQMP. In addition, the proposed project would result in emissions that would be below the SCAQMD regional and localized thresholds during construction (as shown below in Section 3[b]). The thresholds were developed to assist the region in attaining the applicable state and federal ambient air quality standards; therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the NAAQS or CAAQS. Furthermore, as described in more detail in the Project Description, per SCAQMD Rules 403 (Fugitive Dust) and 1166 (VOC Emissions from Decontamination of Soil) the contractor will implement a fugitive dust suppression and air monitoring program during excavation activities as well as odor and vapor control during disturbance of naphthalene-impacted soil. As such, the proposed project would also comply with the applicable SCAQMD rules and regulations, which are developed to implement AQMP control measures.

Operation of the proposed project would be limited to minor activities including a weekly maintenance trip to operate the SVE system and operation of a diesel generator. The diesel generator would be permitted per SCAQMD rules and regulations. As shown in Section 3(b) below, operational emissions would also be below the SCAQMD regional and localized thresholds. The purpose of the proposed project is to reduce the identified contaminants of concern concentrations in the soil, soil vapor, and groundwater to levels protective of human health and the environment, consistent with the current and anticipated future commercial/industrial worker uses of the property. As such, the proposed project would not conflict with the goals of the 2016 AQMP to achieve air quality standards and healthful air. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

Conclusion: Less Than Significant Impact.

b. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact Analysis: By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within the SCAB, and this regional impact is cumulative rather than being attributable to any one source. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The thresholds identified in Tables 3-2 and 3-3 above are designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards. Projects that would not exceed the thresholds of significance would not contribute a considerable amount of criteria air pollutant emissions to the region's emissions profile and would not impede attainment and maintenance of ambient air quality standards.

Table 3-4 shows the maximum daily emissions associated with construction of the proposed project compared to the SCAQMD regional thresholds of significance. Additional modeling assumptions and details are provided in Appendix A.

**Table 3-4
Maximum Daily Regional Construction-Related Emissions**

Description	VOC (lbs/day)	NOx (lbs/day)	CO (lbs/day)	SOx (lbs/day)	PM ₁₀ ¹ (lbs/day)	PM _{2.5} ¹ (lbs/day)
Construction-Related Emissions	4.70	44.00	30.14	0.11	5.23	1.87
SCAQMD Regional Thresholds ²	75	100	550	150	150	55
Exceed Regional Threshold?	No	No	No	No	No	No

Notes: Modeled by AECOM in 2021.

¹ Fugitive dust emissions of PM₁₀ and PM_{2.5} include reductions associated with implementation of Best Management Practices per SCAQMD Rule 403.

² SCAQMD 2019

VOC = volatile organic compounds; NOx = nitrogen oxides; CO = carbon monoxide; SOx = sulfur oxides; PM₁₀ = particulate matter less than 10 microns in diameter; PM_{2.5} = particulate matter less than 2.5 microns in diameter; lbs/day = pounds per day.

Table 3-5 shows the on-site maximum daily emissions associated with construction of the proposed project compared to the SCAQMD LSTs.

**Table 3-5
Maximum Daily Localized Construction-Related Emissions**

Source/Description	NOx (lbs/day)	CO (lbs/day)	PM ₁₀ ¹ (lbs/day)	PM _{2.5} ¹ (lbs/day)
Daily Project On-Site Emissions ²	40.54	28.70	4.78	1.74
SCAQMD Localized Thresholds ³	197	1,796	60	19
Exceed Regional Threshold?	No	No	No	No

Notes: Modeled by AECOM in 2021.

¹ Fugitive dust emissions of PM₁₀ and PM_{2.5} include reductions associated with implementation of Best Management Practices per SCAQMD Rule 403.

² Maximum daily localized emissions account for on-site activities including off-road equipment use, fugitive dust, and on-road vehicle travel on-site and within 500 meters of the nearest receptors. It was assumed that approximately 2%, 18%, and 9% of the total on-road vehicle emissions would occur on-site or within 500 meters of the nearest receptors for the haul, vendor, and worker trips, respectively (estimated portion of vehicle trip lengths [1.25 miles] compared to the total average trip lengths).

³ SCAQMD 2008

NOx = nitrogen oxides; CO = carbon monoxide; PM₁₀ = particulate matter less than 10 microns in diameter; PM_{2.5} = particulate matter less than 2.5 microns in diameter; lbs/day = pounds per day.

As shown in Tables 3-4 and 3-5, the peak daily construction emissions would not exceed any of the SCAQMD regional thresholds or LSTs. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Following construction of the remedial actions, operational activities associated with the proposed project are anticipated to be limited to operation of a diesel generator (24 hours per day) and one weekly visit by a technician. As shown in Table 3-6, operational criteria air pollutant emissions would be minimal.

**Table 3-6
Maximum Daily Operational Emissions**

Source/Description	VOC (lbs/day)	NOx (lbs/day)	CO (lbs/day)	SOx (lbs/day)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)
Daily Project Emissions	1.85	9.66	7.52	0.01	0.82	0.82
SCAQMD Regional Thresholds ¹	55	55	550	150	150	55

**Table 3-6
Maximum Daily Operational Emissions**

Source/Description	VOC (lbs/day)	NOx (lbs/day)	CO (lbs/day)	SOx (lbs/day)	PM₁₀ (lbs/day)	PM_{2.5} (lbs/day)
SCAQMD Localized Thresholds ^{2,3}	N/A	197	1,796	N/A	15	5
Exceed Thresholds?	No	No	No	No	No	No

Notes:

Modeled by AECOM in 2021.

¹SCAQMD 2019

²SCAQMD 2008

³No LST threshold available for VOC or SOx emissions.

VOC = volatile organic compounds; NOx = nitrogen oxides; CO = carbon monoxide; SOx = sulfur oxides; PM₁₀ = particulate matter less than 10 microns in diameter; PM_{2.5} = particulate matter less than 2.5 microns in diameter; lbs/day = pounds per day.

As shown in Tables 3-4 through 3-6, the maximum daily construction-related and operational emissions would not exceed any of the SCAQMD regional or localized thresholds. Therefore, construction and operation of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Conclusion: Less Than Significant Impact.

c. Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis: Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours (SCAQMD 2008). Sensitive receptors also include facilities that house or attract children, the elderly, and people with illnesses or others who are especially sensitive to the effects of air pollutants. As described above, the nearest sensitive receptors include a hotel approximately 125 meters away and residences approximately 388 meters away from the southern edge of the project site.

As shown in Tables 3-4 through 3-6, construction-related and operational activities would result in emissions of criteria air pollutants, but at levels that would not exceed the SCAQMD regional or localized thresholds of significance. The regional thresholds of significance were designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards, which were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. In addition, the LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards and are developed based on the ambient concentrations of that pollutant for each source receptor area. As such, the criteria air pollutant emissions associated with the proposed project would not expose sensitive receptors to substantial criteria pollutant concentrations.

The greatest potential for TAC emissions during construction of remedial actions would be related to diesel particulate matter (diesel PM) emissions associated with heavy-duty equipment operations. The Office of Environmental Health Hazard Assessment (OEHHA) developed a Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). According to OEHHA methodology, health effects from carcinogenic TACs are usually described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs. Construction activities would be temporary and last approximately 16 months depending on the specific remedial action. In addition, construction activities would span across the entire 13.8-acre project site. Therefore, emissions would be generated at distances from 125 meters (410 feet) to 500 meters (1,640 feet) from the nearest sensitive receptors. Because off-road, heavy-duty equipment would be used for a relatively short time period and would not be in the immediate proximity of sensitive receptors, construction activities would not be anticipated to expose sensitive receptors to substantial TAC concentrations.

In addition, in accordance with SCAQMD Rule 1166 and the HASP, the contractor will conduct organic vapor monitoring. Health and safety monitoring for remediation construction workers will consist of both dust monitoring and

organic vapor monitoring in the breathing zone in accordance with the provisions contained in the HASP. In the event contaminants (VOCs) reach unsafe action levels, a respiratory protection program will be implemented (respirators used). Furthermore, there are a number of measures such as dust control, vapor suppression, modification of soil disturbance tasks, covering stockpiles that could be implemented before contaminant levels reach unsafe levels. As described in the Project Description, these programs will be detailed in the RAP and site-specific HASP.

As discussed previously, operation and maintenance of the proposed project is anticipated to be limited to operation of a diesel generator and a weekly trip by a technician. The diesel generator would be a source of diesel PM emissions. Concentrations of diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet from freeways (ARB 2005). Studies also indicate that diesel PM emissions and the relative health risk can decrease substantially within 300 feet (ARB 2005; Zhu et al. 2002). If the diesel generator were to be placed along the southern edge of the project site, it would be located approximately 410 feet away from the nearest sensitive receptor (hotel). Thus, it is anticipated operation of the generator would not expose receptors to substantial pollutant concentrations. In addition, hotel guests would consist of temporary visitors and would not be exposed to emissions for an extended period. Further, as described in more detail in the RAP, the purpose of the proposed project is to reduce the identified contaminants of concern concentrations in the soil, soil vapor, and groundwater to levels protective of human health and the environment, consistent with the current and anticipated future commercial/industrial worker uses of the property. Thus, implementation of the project through installation of the ISGS barrier, SVE system, excavation and disposal of soils, would constrain the current observed impacts to the on-site property, mitigate the potential vapor intrusion, and provide for the protection of human health and the environment. In addition, the restrictive land use covenants in each area would also ensure that the property is not used for residential or other sensitive receptor purposes in the future. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Conclusion: Less Than Significant Impact.

- d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis: The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors are deemed to have a significant impact. Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities.

Construction activities associated with implementation of the remediation activities could result in short-term odor emissions from diesel exhaust associated with construction equipment. In addition, odorous substances may also be encountered during soil excavation activities. However, the limited shallow soil excavations to address naphthalene will be conducted over a short period (one to two weeks) and will be monitored for odors in accordance with the RAP, site-specific HASP and SCAQMD Rule 1166. As described above, controls such as dust control, vapor suppression, and covering of stockpiles would be used to assist in controlling vapors and odors. In addition, the overall remediation activities would be short-term in nature.

Following construction, operation of the proposed project would not introduce new odors or result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. On the contrary, implementation of the remedial response actions would reduce the identified contaminants of concern concentrations in the soil, soil vapor, and groundwater. Therefore, the proposed project will not result in other emissions adversely affecting a substantial number of people.

Conclusion: Less Than Significant Impact.

References Used: 13, 37, 42, 55

4. BIOLOGICAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal

- Federal Endangered Species Act (16 U.S.C. 1531–1543):** The U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries oversee the Federal Endangered Species Act (FESA). The USFWS has jurisdiction over plants, wildlife, and resident fish; NOAA Fisheries has jurisdiction over anadromous fish, marine fish, and marine mammals. The FESA prohibits the take of any fish or wildlife species listed as endangered or threatened; requires that all federal agencies consult with the USFWS and/or NOAA Fisheries to ensure that federal agencies’ actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species; and issues permits to authorize the incidental take of listed species. A federally endangered species is a species of invertebrate, plant, or wildlife formally listed under the FESA as facing extinction throughout all or a significant portion of its geographic range. A federally threatened species is one formally listed by the USFWS as likely to become endangered within the foreseeable future throughout all or a significant portion of its range. A proposed threatened or endangered species is one officially proposed by the USFWS for addition to the federal threatened or endangered species lists. Candidate species and species that are proposed for listing receive no protection under the FESA.
- Migratory Bird Treaty Act (MBTA):** Congress passed the MBTA in 1918 to prohibit the kill or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance

with the MBTA (U.S.C. Title 16, Chapter 7, Subchapter II, Sections 703–712). All birds, except European starlings, English house sparrows, rock doves (pigeons), and non-migratory game birds such as quail, pheasant, and grouse are protected under the MBTA. Game birds are regulated under state hunting permit programs.

- **Clean Water Act Sections 404 and 401 (33 U.S.C. 1251-1376):** United States Army Corps of Engineers (USACE) and United States Environmental Protection Agency (USEPA) regulate the discharge of dredged or fill material into “waters of the U.S.,” including wetlands, under Section 404 of the Clean Water Act (CWA). The USACE has defined the term “wetlands” as follows: “Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (40 CFR 116.3). Some classes of fill activities may be authorized under general permits if specific conditions are met. Projects that would result in the placement of dredged or fill material into waters of the U.S. (WoUS) require a Section 404 permit from the USACE. Section 401 of the CWA requires the issuance of a water quality certification or waiver thereof for all Section 404 nationwide or individual permits issued by the USACE. The USEPA has deferred water quality certification authority to the State Water Resources Control Board (SWRCB). Most projects are regulated by Regional Water Quality Control Boards (RWQCBs). The SWRCB directly regulates multi-regional projects and supports and coordinates the program statewide.

State

- **California Fish and Game Code (CFGC), California Endangered Species Act (Section 2050 et seq.):** California implemented its own Endangered Species Act (CESA) in 1984. The state act prohibits the take of state-listed endangered and threatened species; however, unlike the federal definition, habitat destruction or modification is not included in the state’s definition of take. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. The California Department of Fish and Wildlife (CDFW) administers the CESA and authorizes take through Section 2081 agreements (except for designated “fully protected species”). California Species of Special Concern (SSC) is an informal designation used by the CDFW for specific declining fish, amphibian, reptile, bird, and mammal species that are not listed as endangered, threatened, or rare under CESA. Other species in California for which there is conservation concern are tracked by in the California Natural Diversity Data Base (CNDDDB). These designations do not provide legal protection but signifies that these species are recognized as vulnerable by CDFW and may receive special consideration during a CEQA review process. In regards to listed rare and endangered plant species, the CESA defers to the California Native Plant Protection Act (NPPA) of 1977. The NPPA prohibits importing of rare and endangered plants into California, and the taking and selling of rare and endangered plants. The CESA includes an additional listing category for threatened plants which are not regulated under the NPPA. In this case, plants listed as rare or endangered under the NPPA are not protected under CESA, but can be protected under CEQA. In addition, plants that are not state listed but meet the state standards for listing, are also protected under CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all plant species designated with a California Rare Plant Rank (CRPR) of 1B and 2 by the California Native Plant Society (CNPS), qualify for protection under CEQA, as well as some species of plants with CRPR of 3 and 4. Species are ranked by CNPS in their Inventory of Rare and Endangered Plants of California.
- **CFGC, Bird Protections:** CFGC Section 3503, 3503.5, and 3505 set forth limits on take, possession, and destruction of certain avian species, their nests and eggs. Section 3503 of the CFGC prohibits destruction of the nests or eggs of most native resident and migratory bird species. Section 3503.5 specifically prohibits the taking of raptors or destruction of their nests or eggs. CFGC 3511(a)(1) establishes that fully-protected birds may not be taken or possessed at any time with the exception of permits granted for scientific research. Under these sections of the CFGC, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory non-game bird as designated in the MBTA or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant to CFGC Section 3800.
- **Natural Community Conservation Plan/Habitat Conservation Plan Programs:** The CDFW’s Natural Community Conservation Planning (NCCP) Program promotes collaborative planning efforts designed to provide for the region-wide conservation of plants, animals, and their habitats, while allowing for compatible and appropriate economic activity. Similarly, and generally in parallel, the USFWS implements the Habitat Conservation Plan program which are planning documents required as part of an application for an incidental take permit. These plans describe the anticipated effects of the proposed take; how those impacts will be minimized or mitigated; and how the HCP is to be funded. HCPs can apply to both listed and non-listed species, including those that are candidates or have been

proposed for listing. Conserving species before they are in danger of extinction or are likely to become so can also provide early benefits and prevent the need for listing.

Local

- **Significant Ecological Area Program:** The primary mechanism used by Los Angeles County to conserve biological diversity is a planning overlay called Significant Ecological Areas (SEAs) designated in the County's General Plan Conservation/Open Space Element. SEAs are ecologically important land and water systems that support valuable habitat for plants and animals, often integral to the preservation of rare, threatened, or endangered species and the conservation of biological diversity in Los Angeles County. While SEAs are not preserves, they are areas where Los Angeles County deems it important to facilitate a balance between development and resource conservation. Development activities in the SEAs are reviewed closely in order to conserve water and biological resources such as streams, oak woodlands, and Threatened or Endangered species and their habitat.
- **Los Angeles County Oak Tree Ordinance:** The Los Angeles County Oak Tree Ordinance (County of Los Angeles Code of Ordinances Section 22.56.2050) recognizes oak trees as significant historical, aesthetic, and ecological resources. The goal of the ordinance is to create favorable conditions for the preservation and propagation of this unique and threatened plant heritage. By making this part of the development process, healthy oak trees will be preserved and maintained. The Los Angeles County Oak Tree Ordinance applies to all unincorporated areas of the County. Under the ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus, which is 8 inches or more diameter at breast height (dbh), 4.5 feet above natural grade, or, in the case of oaks with multiple trunks, a combined dbh of 12 inches or more of the two largest trunks, without first obtaining a permit from the Los Angeles County Fire Department.
- **The City of Torrance Tree Removal Municipal Code:** The City of Torrance Municipal Code (Ordinance 75.1.5) regulates the care and removal of trees on public property and is intended to preserve and protect the community's urban forest and to promote the health and safety of City trees. The City's Municipal Code requires that a municipal permit from the City of Torrance Director of Public Works be obtained prior to the removal of trees on City-owned property.

ENVIRONMENTAL SETTING (BASELINE):

The project site consists of an inactive terminal and distribution center. Approximately 80 percent of the 37-acre facility, including much of the project site, is covered with impervious structures consisting of buildings, roads, or paved areas. The remaining 20 percent is unpaved or grassy. A Department of Fish and Game Rarefind report dated May 3, 2004 for the Torrance quadrant was reviewed during the 2004 Initial Study. Although the report identified several species of concern including the tricolored blackbird and Palos Verde blue butterfly, the habitat needed to support those species (open water, nesting reeds, coastal sage brush, and open space) are not found in disturbed sites such as the project site.

Biological Study Area

The Biological Study Area (BSA) includes the footprint of the 13.8-acre project site plus a 500-foot buffer. A buffer around the project component was evaluated in order to capture potential indirect effects to biological resources from implementation of the project. Indirect effects could include elevated noise and dust levels, soil compaction, and increased human activity within the BSA. A 500-foot buffer is standard for capturing potential indirect impacts from a project on biological resources. It is anticipated that indirect impacts beyond 500 feet would be diffuse and would not significantly impact biological resources.

Vegetation Communities and Plants

Vegetation communities are assemblages of plant species that commonly coexist. The classification of vegetation communities is based on the life form of the dominant species within that community and the associated species. No native plant communities occur within the footprint of the project components and throughout the BSA. The vegetation observed on aerial maps within the BSA are the non-native ornamental shrubs located on the east side of the pond, located in the Heil Separator Area, and the non-native ornamental shrubs located within the 500-foot buffer in the City Stormwater Basin, east of Parcel C.

Special-Status Plant Species

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing (Candidates) by the USFWS, CDFW, and the CNPS. A list of regional special-status plant species was obtained to UCC Torrance RAP Draft IS/ND – July 2021

evaluate the potential for such species to occur in the BSA of the project components by conducting a review of the CNDDDB (CDFW 2021), the CNPS's Inventory of Rare and Endangered Plants (CNPS 2021a), and the USFWS's online IPaC review process (USFWS 2021a). A total of 31 plant species were identified during reviews of the CNDDDB and CNPS inventories to have historically been recorded from the Torrance and surrounding eight quadrangles, and from a search of IPaC for the project area, including 9 federally and/or state-listed species, or candidates for listing. Results of the CNDDDB, CNPS, and IPaC reviews are included in Appendix B. Special-status plants also include species protected under local regulation or ordinance, such as the Los Angeles County Tree Ordinance and the City of Torrance Tree Removal Municipal Code.

The footprint of the project components consists of paved, and graveled areas which do not provide the specific habitat requirements needed to support special-status plant species. The BSA of the project components also primarily includes industrial developed areas unsuitable for special-status plants.

No vegetation or tree removal is anticipated as part of the project implementation; therefore, no county or city tree ordinances will be impacted.

Special-Status Wildlife Species

Special-status wildlife species include those listed by the USFWS under the FESA and by CDFW under CESA. USFWS and CDFW officially list species as either Threatened, Endangered, or as Candidates for listing. Additional species receive federal protection under the MBTA, and state protection under the CFGC and CEQA Section 15380(d). A list of regional special-status wildlife species was obtained by conducting a review of the CNDDDB for the Torrance and surrounding eight quadrangles, and from a search of IPaC for the project area. A total of 30 wildlife species were identified during reviews of the CNDDDB on-line inventories to have historically been recorded from the Torrance and surrounding eight quadrangles, and from a search of IPaC for the project area, including 16 federally and/or state-listed species, or candidates for listing. Results of the CNDDDB and IPaC reviews are included in Appendix B.

One CNDDDB record of a federally and/or state-listed wildlife species occurs within the BSA and three CNDDDB records occur within 1 mile of the BSA. These include records of Palos Verdes blue butterfly (within the BSA, federally-listed endangered), Southern California legless lizard (within 0.5 miles of BSA, CDFW species of conservation concern), crotch bumble bee (within a mile of BSA, state-listed candidate), and coast horned lizard (within a mile of the BSA, CDFW species of conservation concern). The potential for these species to occur within the BSA of the project is discussed below.

Palos Verdes Blue Butterfly

The Palos Verdes blue butterfly (*Glaucopsyche lyadamas paloverdensis*) is a rare butterfly that is only found on coastal sage scrub habitat within the Palos Verdes Peninsula. The butterfly's host plants include the Santa Barbara milkvetch (*Astragalus trichopodus* var. *lonchus*) and the common deerweed (*Lotus scoparius*). Adults are observed from late January to early May and have a short lifespan of 5 days. There is one CNDDDB occurrence recorded of the species within the BSA, the location (GPS) information is suppressed, and the occurrence states the species was observed on coastal sage scrub habitat. There is no coastal sage scrub habitat present within the BSA, there is a large parcel of undeveloped land, 965 feet to the southeast of Parcel C that could potentially support the species, however the species is not expected to occur within the BSA because of lack of native habitat.

Southern California Legless Lizard

The southern California legless lizard (*Anniella stebbinsi*) occurs throughout southern California and Baja California. This underground species is found in sandy or loose loamy soils under sparse vegetation. Disjunct populations occur in the Tehachapi and Piute Mountains of Kern County. The lizard occurs in soils with high moisture content in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. There is a large population that occurs in the El Segundo Dunes. There is one CNDDDB occurrence of the species occurring within half of mile of the BSA in an undeveloped parcel of land that occurs southeast of Parcel C, however no suitable habitat for the species occurs within the BSA.

Crotch Bumble Bee

The crotch bumble bee (*Bombus crotchii*) is found in coastal California and east towards the Sierra-Cascade crest. The species food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. There is a CNDDDB occurrence of the species within one mile, however the record is from 1938. There is also another occurrence

of the species from the early 2000's when the crotch bumble bee was observed during surveys for the Palos Verdes blue butterfly on the south slopes of the Palos Verdes peninsula. The peninsula occurs over 5 miles to the west of the BSA and no suitable habitat or food plants for the species occurs within the BSA, therefore the species is not expected to occur within the BSA.

Coast Horned Lizard

The coast horned lizard (*Phrynosoma blainvillii*) is historically found throughout California along the Pacific coast from the Baja California border west of the deserts, and the Sierra Nevadas, north of the Bay Area, and inland as far north as Shasta Reservoir, and south into Baja California. The species frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Occurs in open areas for sunning, shrubs for cover, patches of loose soil for burrowing, and abundant supply of ants and other insects. A 1989 CNDDDB record of the species occurs within one mile of the BSA in El Nido Park, however no suitable habitat for the species occurs within the BSA.

Sensitive Natural Communities

Sensitive natural communities are habitats that are designated by CDFW as rare in the region in the CNDDDB, support special-status plant or wildlife species, or receive regulatory protection (i.e., Section 404 of the CWA and/or Sections 1600 et seq. of the CFGC). Rare communities are given the highest inventory priority. Local regulatory overlays that protect natural communities are also discussed below.

CDFW Sensitive Natural Communities

A list of regional sensitive natural communities was obtained by conducting a review of the CNDDDB for the Torrance and surrounding eight quadrangles. A total of 3 sensitive vegetative communities were identified, Southern California salt marsh, Southern Coastal Bluff Scrub and Southern Dune Scrub. Results of the CNDDDB review is included in Appendix B. None of the communities identified during the CNDDDB review occur within the BSA. Most are known from five plus miles to the west along the coast in the Palos Verdes Peninsula.

USFWS-Designated Critical Habitats

Critical Habitats designated by USFWS are specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. These features, or Primary Constituent Elements (PCE), are the physical and biological features that are essential to the conservation of a species, which the designated Critical Habitat is based upon. A review of USFWS's Critical Habitat Mapper (USFWS 2021c) indicated that there is no critical habitat for endangered or threatened federally species within the BSA.

Wetlands and Other Waters

Reviews of the Torrance quadrangle, aerial imagery of the project areas, and the USFWS National Wetlands Inventory (NWI)¹¹ were conducted to determine if aquatic communities (i.e. wetlands or other waters) under regulatory jurisdiction of the USACE, CDFW, and/or RWQCB occur within proximity of the project components. One such features were determined to occur within the BSA of the Heil Separator Area. The online NWI Mapper indicates that a Freshwater Pond occurs within the BSA which is where the decommissioned Heil Separator Area is located. From aerial imagery, several large shrubs occur on the east side of the pond.

Natural Community Conservation Plan/Habitat Conservation Plan Areas (NCCP/HCP)

A review of adopted HCP and NCCP areas¹² occurring in California was conducted to determine if the BSA of the project components fall within the boundary of any such plans. Results of the review indicate that no BSA falls within the boundary of a NCCP/HCP area.

Significant Ecological Areas (SEA)

A review of the Los Angeles County Department of Regional Planning (LADRP) SEA and Coastal Resource Areas Policy Map 13 indicated that none of the project components coincide with a SEA.

Wildlife Corridor

In an urban context, a wildlife migration corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two comparatively undisturbed habitat fragments, or between a habitat fragment and some vital resource that encourages population growth and diversity. Habitat fragments are isolated patches of habitat separated by otherwise foreign or inhospitable areas, such as urban tracts or highways. Two types of wildlife migration corridors seen in urban settings are regional corridors, defined as those linking two or more large areas of natural open space, and local corridors, defined as those allowing resident wildlife to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development.

The BSA consists of an industrial facility with paved or graveled surfaces, sparse trees and shrubs, and a decommissioned heil separator which contains a concrete lined freshwater pond. The sparse trees and shrubs within and adjacent to the BSA provide some opportunities for cover, resting, foraging, and nesting to localized bird populations; however, they do not provide functions as a significant wildlife movement corridor.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to biological resources if it would:

- 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?
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- 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?
- 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?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

In order to determine the impacts to biological resources, existing data on special-status species and sensitive natural communities were reviewed as part of a literature search. The following agency resources were reviewed to provide a list of regional special-status and sensitive biological resources and are identified in the impact evaluation below:

- CDFW California Natural Diversity Database (CNDDDB)
- CDFW Rarefind Report
- CNPS Inventory of Rare and Endangered Plants
- USFWS Information for Planning and Conservation (IPaC)
- USFWS National Wetlands Inventory (NWI)
- USFWS Critical Habitat Mapper
- Los Angeles County Department of Regional Planning's (LADRP) Significant Ecological Areas (SEA)

Biological resources may be either directly or indirectly impacted by a project. Direct and indirect impacts may be either permanent or temporary in nature. These impact categories are defined below:

- Direct: Any alteration, physical disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Examples include clearing vegetation, loss of individual species and/or their habitats, and encroaching into wetlands or a river.
- Indirect: As a result of project-related activities, biological resources may also be affected in a manner that is ancillary to physical impacts. Examples include elevated noise and dust levels, soil compaction, increased human activity, decreased water quality, and the introduction of invasive wildlife (domestic cats and dogs) and plants.

- Permanent: All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.
- Temporary: Any impacts considered to have reversible impacts on biological resources can be viewed as temporary. Examples include the generation of fugitive dust during construction, or removing vegetation for the preparation of construction activities, and either allowing the natural vegetation to recolonize or actively revegetating impacted areas. Surface disturbance that removes vegetation and disturbs the soil is considered a long-term temporary impact because of slow natural recovery in arid ecosystems.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

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

Impact Analysis: Minor construction activities such as excavation, hauling of materials/soils, installing horizontal wells, and incorporating other minor remediation elements will occur within the developed industrial parcel. Also, no tree removal or tree trimming is expected to occur within the BSA. These site conditions do not provide the habitat requirements to support special-status species. CNDDB occurrences for four special-status species occur within the BSA or within a mile of the BSA, however no suitable habitat for these species occurs within the BSA. As a result, no impacts to special-status plant and wildlife species or their habitats would not occur as such species are not anticipated within the footprints of the project components.

Conclusion: No Impact.

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Impact Analysis: According to the National Wetlands Inventory managed by the United States Fish and Wildlife Service (USFWS), the project site does not contain riparian habitat only a small freshwater pond located in the Heil Separator Area. This pond was used for the separation of oil and water associated with ethylene production, the eastern side is surrounded by large shrubs. These shrubs will not be removed or trimmed during project implementation. There is also a stormwater basin located to the east of the BSA, it is classified as a Freshwater Emergent Wetland/Freshwater Pond (USFWS 2021b). However, no construction will occur within the stormwater basin and it is not part of the project area. Therefore, implementation of the proposed project will have no impact on any riparian habitat or other sensitive natural community.

Conclusion: No Impact.

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

Impact Analysis: A freshwater pond classified as PUSCr is in Parcel B, Heil Separator Area, the northeast corner of the study area. This pond is approximately 0.05 acres and is classified as the Palustrine (P) system, which is a nontidal wetland, lacking vegetation, is less than 8 acres with a water depth of less than 8.2 feet. The pond is under the class Unconsolidated Shore (US), which includes wetlands with the following characteristics; less than 75 percent areal cover of stones, boulders or bedrock and less than 30 percent areal cover of vegetation. This freshwater pond is also under the category of as wetland that is seasonally flooded and is concrete lined. The water regime is characterized as seasonally flooded (C), which indicates surface water is present for extended periods generally early in the growing season but is absent by the end of the growing season in most years. The last wetland classification code is an artificial substrate (r), which indicates that the pond is a concrete-lined wetland. This pond is a decommissioned Heil Separator formerly used for the separation of oil and water associated with ethylene production, the northeast side of the pond is lined with shrubs, however this pond is not expected to be removed or back filled during project implementation. Therefore, project implementation would have no impacts with respect to wetlands as defined by Section 404 of the Clean Water Act.

Conclusion: No Impact.

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

Impact Analysis: As stated previously, the project site is a previously developed industrial property in a highly industrial area. Within the vicinity of the project site, there are no large areas of natural habitat that would facilitate wildlife movement or serve as a wildlife corridor. The project would not involve any changes to the existing use of the project site and would not impede movement of any species. Although a few mature trees are present on the project site, implementation of the proposed project would not adversely impact native resident wildlife species potentially occurring on the site. The MBTA and California Fish and Game Code 3503 protect most native bird species from destruction or harm. This protection extends to individuals, as well as any part, nest, or eggs of any bird listed as migratory. Most native North American bird species are on the MBTA list. However, because there is no demolition of structures proposed, project implementation would not result in any adverse impacts to nesting birds potentially occurring on the project site. In addition, approval of the proposed project is considered a planning action and does not include any physical improvements that would result in impacts to wildlife movement corridors. Future individual projects subject to discretionary approval would be subject to separate environmental review on a project-specific basis, in accordance with the provisions of CEQA and the State CEQA Guidelines. Therefore, the proposed project would have no impact on migratory birds on the project site.

Conclusion: No Impact.

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

Impact Analysis: The City of Torrance Municipal Code (Ordinance 75.1.5) and the Los Angeles County Oak Tree Ordinance (Section 22.56.2050) regulates the care and removal of trees on public property. The parcel is privately owned and there are several shrubs on the east side of the pond in the Heil Separator Area of the study area however, no vegetation/tree removal or trimming is anticipated. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources.

Conclusion: No Impact.

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

Impact Analysis: There are no adopted Habitat Conservation Plans (HCPs), Natural Communities Conservation Plans (NCCP), or other similar plans within the City. Therefore, the project would not conflict with any plan related to the protection of biological resources.

Conclusion: No Impact.

References Used: 9, 11, 13, 32, 49, 50

5. CULTURAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Cultural resources in California are protected by federal, state, and local regulations, statutes, and ordinances. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. State and federal laws use different terms for cultural resources. California state law discusses significant cultural resources as “historical resources,” whereas federal law uses the terms “historic properties” and “historic resources.” In all instances where the term “resource” or “resources” is used, it is intended to convey the sense of both state and federal law.

State:

- **California Register of Historical Resources:** The California Register of Historical Resources (CRHR) was created to identify resources deemed worthy of preservation on a state level and was modeled closely after the National Register of Historic Places. Resources listed on the National Register are automatically listed on the CRHR. The criteria for eligibility for listing in the CRHR are based on National Register criteria but are identified as 1 through 4 instead of A through D. To be eligible for listing in the CRHR, a property must be at least 50 years of age and possess significance at the local, state, or national level, under one or more of the following four criteria:
 1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
 2. It is associated with the lives of persons important to local, California, or national history; or
 3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
 4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, historic resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated regarding the retention of location, design, setting, materials, workmanship, feeling, and association.

ENVIRONMENTAL SETTING (BASELINE):

The project site is in a completely developed area dominated by industrial uses. The inactive Torrance facility was built in 1956; prior to its construction, the project site was undeveloped sand dunes (U.S. Geological Survey [USGS] 1896, 1951). No watercourses were historically depicted near the project site. Geologically, the project site is mapped as “Qos,” which is older Pleistocene stabilized dune and drift sand (Dibblee et al. 1999). Soils in the project site are Urban Land-Marina complex (University of California, Davis 2021). “Urban Land” soils have been heavily modified by development; Marina series soils are well-developed loamy sandy soils that formed in old sand dunes near the coast (National Cooperative Soil Series 2001). As soils in the project site date to the Pleistocene, the potential for buried archaeological resources is low because the soils pre-date human occupation of the area.

Precontact Setting

The first evidence of human occupation in the Los Angeles area dates to at least 9000 years B.P. (McCawley 1996). The broader peopling of the Los Angeles Basin is associated with the Millingstone period, beginning approximately 6500 B.P. (Wallace 1955). Early Millingstone occupations are typically identified by the presence of handstones (manos) and millingstones (metates). By 3500 B.P., a number of socioeconomic changes occurred (Erlandson 1994; Wallace 1955) that are associated with the period known as the Intermediate Horizon (Wallace 1955). Increasing population size necessitated the intensification of existing terrestrial and marine resources (Erlandson 1994). The Intermediate Horizon marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and nonutilitarian materials were acquired, and travel routes were extended. Archaeological evidence suggests that the margins of numerous rivers, marshes, and swamps in the Los Angeles Basin served as ideal locations for prehistoric settlement during this period.

The Late Prehistoric period spans from approximately 1500 B.P. to the Spanish mission era. A sharp increase in the number of components seems to indicate population growth at this time, and artifact assemblages reflect continued technological improvements.

Ethnographic Setting

The project site is in territory traditionally occupied by the Tribe known to anthropologists and historians as the Gabrielino and which tribal descendants call the Tongva or Kizh. The Gabrielino are estimated to have numbered around 5,000 in the precontact period (Kroeber 1925 [reprinted 1976]). The coast from San Pedro north to Topanga Canyon was inhabited year-round; secondary subsistence villages were concentrated inland near resources such as sage stands or acorn or pine nut groves (Bean and Smith 1978).

Spanish explorers made brief visits to Gabrielino territory in 1542 and 1602, and on both occasions, the two groups exchanged trade items. Sustained contact with Europeans did not begin until after 1769, when Gaspar de Portolá and a small Spanish contingent began their exploratory journey along the California coast from San Diego to Monterey. A string of 21 missions was established in the years that followed the Portolá expedition, including Mission San Gabriel Arcángel in 1771. Gabrielino people remain in their traditional territory, which includes Los Angeles County, and continue to engage in traditional cultural practices.

Historic Period Setting

Rancho San Pedro lands, located between Los Angeles and San Pedro Bay, were essential in the development of commerce and industry in the region. In 1854, Manuel Dominguez sold 2,400 acres to a group of investors who planned to develop a commercial port of entry at the mouth of the Los Angeles River and constructed new docks at San Pedro in 1857. In 1869, the 21-mile-long Los Angeles & San Pedro Railroad, the first in Southern California, was constructed to transport goods from the port to the city through portions of Rancho San Pedro. A second port was established in Redondo Beach in the 1880s and by 1888, the Atchison, Topeka and Santa Fe (AT&SF) Railway had been constructed, terminating in Redondo Beach (McCandless n.d.).

Torrance developed as a model industrial city on former Rancho San Pedro land in 1912 under the auspices of the Dominguez Land Company (City of Torrance n.d.). Several companies, including Union Tool Company and Pacific Electric Railway, built factories in Torrance. Industrial war production, including chemical manufacturing, exponentially expanded during WWII. In the postwar period, the population of Torrance grew rapidly. Other large companies that moved to Torrance included Dow Chemical and Reynolds Metals Company. A total of 78,000 new residents moved to Torrance between 1950 and 1960. By 1970, Torrance, with 134,584 people, was the third-largest city in Los Angeles County and the 11th most populous city in California. Although the population declined after 1970, housing increased. Economic revitalization efforts began during the 1980s, with new residential developments and new manufacturing corporations (City of Torrance n.d.). The extant UCC Torrance facility was built in 1956 for polyethylene manufacturing. It operated until 1982, when the manufacturing operations were discontinued and much of the facility was decommissioned.

Previous Cultural Resource Studies

A records search was conducted on June 19, 2020 at the South Central Coastal Information Center (SCCIC) for a project adjacent to the current project area (Records Search File No. 21343.7477) that included the project site and a 0.25-mile radius (Attachment A). One previous cultural resource study included the current project site:

- LA-10333: McKenna, Jeanette M., 2009. *A Brief Historic Context Statement Prepared for the General Plan Update: The City of Torrance, Los Angeles County, California*

No resources were identified in the project site as a result of this survey.

Three additional surveys were conducted within a 0.25-mile radius of the project site:

- LA-02904: Stickel, Gary E., 1993. *Draft Report: A Phase I Cultural Resources Literature Search for the West Basin Water Reclamation Project*.
- LA-04760: Duke, Curt, 1999. *Cultural Resource Assessment for Pacific Bell Mobile Services Facility La586-02, County of Los Angeles, California*. [copy not provided by SCCIC]
- LA-11150: Maxwell, Pamela, 2003. *West Basin Municipal Water District Harbor/South Bay Water Recycling Project*.

Previously Recorded Cultural Resources

The SCCIC records search identified one previously recorded cultural resource mapped within 0.25 mile of the proposed project area. This resource, P-19-000100 (CA-LAN-100), was recorded as one of a series of small precontact campsites in Torrance by F.H. Racer in 1939 (Attachment A). Racer states, “The only artifacts I know of being found there was a large metate and a mano stone,” i.e., prehistoric stone tools (Racer 1939:5). Racer also notes these artifacts “may have been extraneous” (Racer 1939:5), although he does not explain what he means by extraneous. The precise location where these artifacts was found is not recorded, but the site is documented near the intersection of 190th Street and Hawthorne Boulevard approximately 0.2 miles northwest of the project site. The site appears on the SCCIC’s maps as a 500-foot-diameter circle with its midpoint within the intersection. The site was not evaluated for significance at its time of recordation and it has not been relocated.

California Historical Landmarks

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical interest. A search of the California Historical Landmarks list revealed no California Historic Landmarks within 0.25 mile of the proposed project area.

Archaeological Survey

An archaeological survey was not completed because the project site is completely developed. Approximately 80 percent of the site is covered with impervious surfaces (i.e., buildings, roads, and paved areas). The remaining approximately 20 percent is generally covered with gravel.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines and Public Resources Code Section 21074, the proposed project would have a significant impact related to cultural resources if it would:

- cause a substantial adverse change in the significance of a unique archaeological resource or a historical resource as defined in Section 21083.2 of the Public Resources Code and Section 15064.5 of the CEQA Guidelines, respectively; or
- disturb any human remains, including those interred outside formal cemeteries.

Section 15064.5 of the CEQA Guidelines defines “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in demolition or material alteration in an adverse manner of those physical characteristics of a resource that:

- conveys its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR;
- accounts for its inclusion in a local register of historical resources pursuant to Public Resources Code Section 5020.1(k) or its identification in a historical resources survey meeting the requirements of Public Resources Code Section 5024.1(g), unless the public agency reviewing the effects of the proposed project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- conveys its historical significance and that justify its eligibility for inclusion in the CRHR, as determined by a lead agency for purposes of CEQA.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No prior cultural resources studies have been performed for the proposed project.

A records search was conducted on June 19, 2020 at the South Central Coastal Information Center (SCCIC) for a project adjacent to the current project area (Records Search File No. 21343.7477) that included the current project site and a 0.25-mile radius. The results of this records search were used for the current project. The inventories of the National Register of Historic Places (NRHP), the CRHR, the California State Historic Resources Inventory (HRI), and the California Historical Landmarks and Points of Interest were also reviewed to identify cultural resources within a 0.25-mile radius of the project site. Supplemental research was conducted to provide contexts for the project area.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?

Impact Analysis: No previously recorded historical resources were identified in the project site. The extant UCC Torrance facility was originally constructed in 1956 for polyethylene manufacturing and has since been modified multiple times to accommodate new uses and its decommission in 1982. The proposed project would not involve the construction or demolition of permanent structures. Project work would include the injection of an aqueous solution into the aquifer (Area 1); excavation to remediate soils (Areas 2 and 4); and the installation of a soil vapor extraction system, including subsurface horizontal vapor extraction wells (Areas 2 and 3). Extensive remedial investigations and sampling have occurred at the facility since 1972; the proposed work would be consistent with these prior activities. The proposed project activities would not cause any adverse change in the significance of a historical resource as defined in §15604.5.

Conclusion: No Impact.

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5

Impact Analysis: No previously recorded archaeological resources were identified in or adjacent to the project site and the archaeological sensitivity of the project site appears low. One previously recorded precontact site is within 0.25-mile of the project site; however, the site is poorly documented. The project site is not situated near any natural watercourses or springs, suggesting lower sensitivity. Geologically, the project site is underlain by a Pleistocene-age landform and soils in the project site are well-developed, having formed in old sand dunes. If archaeological resources had been present in the project site, they would have been present at the surface (i.e., not buried) due to the age of the landform. Considering the project site has been heavily modified since the precontact era, it is unlikely any archaeological resources would remain present and intact in the project site. Aside from the construction of the original facility, extensive remedial investigations and sampling have occurred at the facility since 1972; the proposed work would be consistent with these prior activities. The proposed project activities would not cause any adverse change in the significance of an archaeological resource as defined in §15604.5.

Conclusion: No Impact.

- c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis: No indications of human remains, including those interred outside dedicated cemeteries, were identified during background research for the proposed project. In the unlikely event that human remains are encountered during implementation of the project, those remains would require proper treatment in accordance with applicable laws.

Conclusion: No Impact.

References Used: 1, 3, 19, 24, 26, 33, 35, 40, 51, 52

6. ENERGY				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The regulatory background of energy plans, policies, regulations, and laws is presented below. Generally, these plans, policies, regulations, and laws do not directly apply to the proposed project, but are presented to provide context to the regulatory setting.

Federal

- Energy Policy and Conservation Act of 1975:** The Energy Policy and Conservation Act of 1975 established the first fuel economy standards for on-road motor vehicles sold in the United States. The National Highway Traffic and Safety Administration is responsible for establishing standards for vehicles and revising the existing standards. The Corporate Average Fuel Economy program was created to determine vehicle manufacturers' compliance with the fuel economy standards. The USEPA administers the testing program that generates the fuel economy data. The Energy Policy and Conservation of 1975 has been amended and includes energy efficiency programs for certain commercial and industrial equipment, including pump energy conservation standards.
- National Energy Act of 1978:** The National Energy Act of 1978 includes the Public Utility Regulatory Policies Act (Public Law 95-617), Energy Tax Act (Public Law 95-318), National Energy Conservation Policy Act (Public Law 95-619), Power Plant and Industrial Fuel Use Act (Public Law 95-620), and Natural Gas Policy Act (Public Law 95-621). The intent of the National Energy Act was to promote greater use of renewable energy, provide residential consumers with energy conservation audits to encourage slower growth of electricity demand, and promote fuel efficiency. The Public Utility Regulatory Policies Act created a market for nonutility electric power producers to permit independent power producers to connect to their lines and to pay for the electricity that was delivered. The Energy Tax Act promoted fuel efficiency and renewable energy through taxes and tax credits. The National Energy Conservation Policy Act required utilities to provide residential consumers with energy conservation audits and other services to encourage slower growth of electricity demand.
- Energy Policy Acts of 1992 and 2005:** The Energy Policy Act of 1992 was enacted to reduce dependence on imported petroleum and improve air quality by addressing all aspects of energy supply and demand, including alternative fuels, renewable energy, and energy efficiency. This law requires certain federal, state, and local government and private fleets to purchase alternative fuel vehicles. The act also defines "alternative fuels" to include fuels such as ethanol, natural gas, propane, hydrogen, electricity, and biodiesel. The Energy Policy Act of 2005 was enacted on August 8, 2005. This law set federal energy management requirements for energy-efficient product procurement, energy savings performance contracts, building performance standards, renewable energy requirements, and use of alternative fuels. The Energy Policy Act of 2005 also amends existing regulations, including fuel economy testing procedures.
- Energy Independence and Security Act of 2007:** Signed into law in December 2007, the Energy Independence and Security Act was enacted to increase the production of clean renewable fuels; increase the efficiency of products, buildings, and vehicles; improve the federal government's energy performance; and increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy. The Energy Independence and Security Act included the first increase in fuel economy standards for passenger cars since 1975. The act also included a new energy grant program for use by local governments in implementing energy-efficiency initiatives, as well as a variety of green building incentives and programs.

- **Renewable Fuel Standard Program:** Created by the Energy Policy Act of 2005, which amended the CAA, the Renewable Fuel Standard Program established requirements to replace certain volumes of petroleum-based fuels with renewable fuels. The four renewable fuel types accepted as part of the Renewable Fuel Standard Program are biomass-based diesel, cellulosic biofuel, advanced biofuel, and total renewable fuel. The 2007 Energy Independence and Security Act expanded the program and its requirements to include long-term goals of using 36 billion gallons of renewable fuels and extending annual renewable-fuel volume requirements to year 2022. “Obligated parties” such as refiners and importers of gasoline or diesel fuel must meet specific blending requirements for the four renewable fuel types. USEPA implements the program in consultation with U.S. Departments of Agriculture and Energy. The obligated parties are required to demonstrate their compliance with the Renewable Fuel Standard Program.

State

- **Senate Bills 1078 and 107, Executive Orders S-14-08 and S-21-09, and Senate Bills 350 and 100:** Senate Bill (SB) 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. Executive Order S-14-08 expanded the state’s Renewables Portfolio Standard (RPS) to 33 percent renewable power by 2020. Executive Order S-21-09 directs the CARB, under its AB 32 authority, to enact regulations to help the state meet its RPS goal of 33 percent renewable energy by 2020. The 33 percent-by-2020 goal and requirements were codified in April 2011 with SB X1-2. This new Renewables Portfolio Standard applies to all electricity retailers in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. This was followed by SB 100 in 2018, which further increased the RPS to 60 percent by 2030 and added the requirement that all state’s electricity come from carbon-free resources by 2045. These requirements reduce the carbon content of electricity generation and would reduce GHG emissions associated with both existing and new development.

Local

- **City of Torrance Energy Efficiency Climate Action Plan:** In December 2015, the City of Torrance prepared the City’s Energy Efficiency Climate Action Plan (EECAP) to set energy efficiency reduction targets to become more energy efficient. The EECAP provides the framework to implement and monitor energy efficiency strategies in the City that are feasible, cost-effective, and improve the quality of life for its citizens. Further, the EECAP serves as a foundation for developing a comprehensive Climate Action Plan (CAP), which would expand the strategies for reducing GHG emissions to all sectors of the City’s economy, including transportation and solid waste.

There are no specific regulations or policies that relate to construction energy consumption or efficiency other than construction waste recycling policies and regulations that are related to the State’s Climate Change Scoping Plan that may indirectly reduce energy consumption related to the proposed project’s fuel or materials use. Compliance and conformance with these regulations and policies is discussed in Section 8, Greenhouse Gas Emissions.

ENVIRONMENTAL SETTING (BASELINE):

The project site consists of an inactive terminal and distribution center. Approximately 80 percent of the 37-acre UCC Torrance facility, including the project site, is covered with impervious structures consisting of buildings, roads, or paved areas. The UCC Torrance facility was built in 1956 for polyethylene manufacturing and operated until 1982, when the manufacturing operations were discontinued and much of the facility was decommissioned. Electric services in the project area are provided by Southern California Edison (SCE). SCE is one of the largest electric utilities in the United States and serves approximately 15 million people in a 50,000 square-mile area of central, coastal and Southern California.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to geological resources if it would:

- Result in potentially significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Result in potentially significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis: Energy efficiency is a possible indicator of environmental impacts. The actual adverse physical environmental effects of energy use and the efficiency of energy use are detailed throughout this Initial Study in the environmental topic-specific sections. For example, the use of energy for electricity consumption leads to greenhouse gas (GHG) emissions, the impacts of which are addressed in Section 8, "Greenhouse Gas Emissions." There is no physical environmental effect associated with energy use that is not addressed in the environmental topic-specific sections of this Initial Study.

Energy consumption during construction of the proposed project would involve energy used by construction equipment, haul trucks, and workers' commute vehicles. Heavy-construction equipment, such as excavators, rubber tired loader, forklifts, and heavy trucks, would primarily use diesel fuel, while work trucks (pickups) and personal vehicles used for commuting would primarily be gasoline-fueled. Based on the anticipated off-road equipment usage, haul truck trips, worker trips, and diesel fuel for the generator, it is estimated that the annual energy demand would be approximately 2,277 million British thermal unit (MMBtu). Additional details are provided in Appendix A. Based on the anticipated phasing of the proposed project, anticipated equipment and construction work staff, temporary nature of construction, and project type, the proposed project would not include unusual characteristics that would necessitate the use of construction equipment that is less energy-efficient than at comparable construction sites.

In addition, contractors are required, in accordance with the CARB Airborne Toxic Control Measure for Diesel-Fueled Commercial Motor Vehicle Idling, to minimize idling time of construction equipment by shutting equipment off when not in use or reducing the time of idling to 5 minutes. These required practices limit wasteful and unnecessary energy consumption. Further, as described in the RAP, prior to subsurface work, utility clearance will be requested to verify potential conflicts to avoid any disruptions. Therefore, it is expected that fuel consumption associated with construction of the proposed project would not be inefficient, wasteful, or unnecessary.

As discussed previously, operation of the proposed project would be limited to operation of a diesel generator to power an electric vacuum blower and a weekly visit by a technician. Therefore, the proposed project is not anticipated to increase electricity demand or affect the existing energy infrastructure in the region.

Conclusion: Less than Significant Impact.

- b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis: The proposed project is not using land that was otherwise slated for renewable energy production and does not otherwise conflict with any state or local renewable energy plans. Therefore, this project's construction would not obstruct any state or local plans for renewable energy and would conform with state and local plans for energy efficiency. In addition, the purpose of the proposed project is to reduce the identified contaminants of concern concentrations in the soil, soil vapor, and groundwater to levels protective of human health and the environment, preventing further off-site migration of the contaminants. Therefore, this project's operation and maintenance would not obstruct any state or local plans for renewable energy and or energy efficiency

Conclusion: No Impact.

References Used: None.

7. GEOLOGY AND SOILS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The following subsections discuss the various codes, regulations and policies applicable to geology and soils at the federal, state and local levels.

- National Earthquake Hazards Reduction Program Reauthorization Act of 2004:** The Earthquake Hazards Reduction Act {(Public Law 95-124, 42 U.S.C. 7701 et. seq.), as amended by Public Laws 101-614, 105-47, 106-503, and 108-360.} was enacted in 1977 to “reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program.” To accomplish this, the Act established the National Earthquake Hazards Reduction Program.
- Alquist-Priolo Earthquake Fault Zoning Act:** The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621-2624, Division 2, Chapter 7.5) was enacted in 1972 to address the hazard of surface faulting to structures for human occupancy. The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to

prevent the construction of buildings intended for human occupancy on the surface traces of active faults. Local agencies must enforce the Alquist-Priolo Earthquake Fault Zoning Act in the development permit process, where applicable, and may be more restrictive than state law requires. A 50-foot building setback from any known trace of an active fault is required. The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in California Department of Conservation, California Geological Survey, Special Publications (SP) 42, Fault-rupture Hazard Zones in California.

- **Seismic Hazards Mapping Act:** The Seismic Hazards Mapping Act of 1990 (Public Resources Code Section 2690-2699) addresses the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events. Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate “seismic hazard zones.” Under Public Resources Code Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard.

ENVIRONMENTAL SETTING (BASELINE):

The UCC Torrance facility lies in the Torrance Plain, a physiographic province within the broad coastal plain of the greater Los Angeles area. The broad coastal plain is bordered on the west and south by the Pacific Ocean, on the north by the Santa Monica Mountains, on the east by the Puente Hills, and on the southeast by the Santa Ana Mountains and the San Joaquin Hills. The Torrance Plain is an older geomorphic surface that is west of and parallel to the belt of hills that occur along the Newport-Inglewood structural zone, and is bounded on the west and southwest by the El Segundo Sand Hills and Palos Verdes Hills. The Newport-Inglewood structural zone is a composite faulted anticlinal belt that transects the coastal plain in a northwest-southeast direction and extends from Beverly Hills in the north to Seal Beach in the south. The belt of hills is the surface expression of deformation along the Newport-Inglewood fault zone and includes, from north to south, the Beverly, Baldwin, Rosecrans, Dominguez, Signal, Bixby Ranch, and Landing Hills. The Torrance Plain is a broad featureless area only slightly dissected by local streams.

The Torrance Plain is located within the West Coast groundwater basin, a northwest-southeast trending sub-basin of the Los Angeles coastal groundwater basin. The physiographic boundaries of the West Coast basin are the Ballona Escarpment on the north; the Baldwin, Rosecrans and Dominguez Hills on the east; and the Pacific Ocean on the south and west. The Palos Verdes Hills bound the southwest corner of the basin.

The site-specific geology and hydrogeology consists of mixed sands, varying amounts of silt and clay, as well as two water bearing zones: the shallow Perched Zone groundwater zone and the deeper Gardena-Gage aquifer. as Detailed discussions of site geology and hydrogeology are provided in the *Phase II RI Report* (Montgomery Watson, 2000) and in the *Phase I Environmental Site Assessment* report for Parcels B and C (URS, 2010).

The Lynwood-Silverado aquifer underlies the Gardena-Gage aquifer; however, this unit has not been encountered through on-site activities. The Lynwood-Silverado aquifer lies at 300 to 600 feet bgs and has been extensively developed for water supply. A series of barrier injection wells is maintained west of the project site vicinity to prevent seawater encroachment into the Silverado aquifer system.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to geological resources if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and/or landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Effect a geologic unit or soil unit that is unstable.
- Effect expansive soil.
- Lack ability to support the use of septic tanks.
- Directly or indirectly destroy a unique paleontological resources or site unique geologic feature.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

A Phase II RI Report and Phase I Environmental Site Assessment report for site geology at Parcels B and C was conducted and is included as an appendix to the proposed RAP. Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Impact Analysis: The project site is not located within an Alquist-Priolo Earthquake Fault Zone. The closest known active fault that is zoned under the Alquist-Priolo Special Studies Zone Act is the Newport-Inglewood fault zone, located approximately five miles northeast of the project site.

Conclusion: No Impact.

ii) Strong seismic ground shaking?

Impact Analysis: The project is located within southern California, which is considered a seismically active region that can be expected to experience strong seismic shaking from future earthquakes generated by active faults. Earthquakes that will produce strong shaking at the project site may occur on mapped active or potentially active faults in the region, or on faults with little or no surface expression. Proposed construction of the project would be short-term and limited to the excavation and hauling of soil as well as the installation of additional monitoring wells. Operational activity would be limited to the implementation of ISGS, SVE, and controlled and restrictive monitoring activities, requiring the presence of affiliated personnel on site. No buildings are proposed within the RAP. The proposed project would not expose people or structures to the effects of strong seismic ground shaking.

Conclusion: No Impact.

iii) Seismic-related ground failure, including liquefaction?

Impact Analysis: The project site is not located within an area susceptible to liquefaction according to the City of Torrance General Plan. As such, seismic-related ground failure including liquefaction would not occur.

Conclusion: No Impact.

iv) Landslides

Impact Analysis: The project site is not located within an area prone to earthquake-induced landslides. Project activities will not expose people or structures to the effects of landslides.

Conclusion: No Impact.

- b. Result in substantial soil erosion or the loss of topsoil?

Impact Analysis: Geologic borings and shallow excavations with a depth up to 10 feet will be conducted; however, these activities are not anticipated to result in soil erosion or loss of topsoil. Prior to conducting field activities, boring/well permits will be obtained from the Los Angeles County of Department of Health Services, Environmental Health, Bureau of Environmental Protection. Shallow soil excavations will be backfilled, compacted and restored to the original grade. Impacts are considered less than significant.

Conclusion: Less Than Significant Impact.

- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impact Analysis: Project activities are not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially results in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Conclusion: No Impact.

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis: The site is not located on expansive soils. As such, substantial direct or indirect risks to life or property would not occur.

Conclusion: No Impact.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact Analysis: No septic tanks or alternative wastewater disposal systems would be required with this project.

Conclusion: No Impact.

- f. Directly or indirectly destroy a unique paleontological resources or site unique feature?

Impact Analysis: Paleontological resources or unique features have not been identified for the site.

Conclusion: No Impact.

References Used: 4, 5, 15, 46, 47,

8. GREENHOUSE GAS EMISSIONS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The USEPA is the federal agency responsible for implementing the federal CAA. The Supreme Court of the United States ruled on April 2, 2007, that USEPA must consider regulation of motor vehicle emissions, and that the USEPA had the authority to regulate greenhouse gas (GHG) emissions. In California, CARB is the agency responsible for coordination and oversight of state and local air pollution control programs regulating GHG emissions and for implementing the California CAA.

State

- **Assembly Bill 32:** In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 further details and puts into law the mid-term GHG reduction target established in Executive Order S-3-05: reduce GHG emissions to 1990 levels by 2020. AB 32 also identifies CARB as the state agency responsible for the design and implementation of emissions limits, regulations, and other measures to meet the target. AB 32 also established several programs to achieve GHG emission reductions, including the Low Carbon Fuel Standard and the Cap-and-Trade program. As of 2017, the state has reduced emissions below the revised AB 32 limit of 427 MMT CO₂e.
- **Senate Bill 32:** In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown (Office of Governor Edmund G. Brown Jr., 2016). SB 32 establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030.
- **CARB Climate Change Scoping Plans:** In December 2008, CARB adopted its Climate Change Scoping Plan. A Framework for Change (Scoping Plan), which contains the main strategies California will implement to achieve the required GHG reductions required by AB 32 (CARB 2008). The Scoping Plan also includes CARB recommended GHG reductions for each emissions sector of California’s GHG inventory. CARB is required to update the Scoping Plan at least once every 5 years to evaluate progress and develop future inventories that may guide this process. CARB approved First Update to the Climate Change Scoping Plan: Building on the Framework in June 2014 (CARB 2014). The Scoping Plan update includes a status of the 2008 Scoping Plan measures and other federal, state, and local efforts to reduce GHG emissions in California, and potential actions to further reduce GHG emissions by 2020. In November 2017, CARB released the 2017 Climate Change Scoping Plan, which establishes a framework of action for California to reduce statewide emissions by 40 percent by 2030, compared to 1990 levels (CARB 2017). The 2017 Scoping Plan builds upon the framework established by the 2008 Scoping Plan and the 2014 Scoping Plan Update, while also identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets.

Local

- **City of Torrance Climate Action Plan:** The City of Torrance prepared a Climate Action Plan (CAP) in December 2017 (City of Torrance 2017). The CAP identifies emissions related to community activities, establishes GHG reduction targets consistent with AB 32 and SB 32. The GHG reduction measures are grouped into five strategy areas: land use and transportation; energy efficiency; solid waste; urban greening; and energy generation & storage.

ENVIRONMENTAL SETTING (BASELINE):

GHG emissions play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters earth's atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. Infrared radiation (i.e., thermal heat) is absorbed by GHGs; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth.

GHGs are present in the atmosphere naturally, are released by natural sources, and are formed from secondary reactions taking place in the atmosphere. The following are GHGs that are widely seen as the principal contributors to human-induced global climate change: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO₂. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO₂, the most abundant GHG. GHGs with lower emissions rates than CO₂ may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO₂ (i.e., high GWP). The concept of CO₂-equivalents (CO₂e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

CARB performs an annual GHG inventory for emissions and sinks of the six major GHGs. California produced 425 million metric tons (MMT) CO₂e in 2018 (CARB 2020). Combustion of fossil fuel in the transportation category was the single largest source of California's GHG emissions in 2018, accounting for 40 percent of total GHG emissions in the state. The transportation category was followed by the industrial and electric power (including in-state and unspecified imports) categories, which account for 21 and 15 percent of the state's total GHG emissions, respectively (CARB 2020).

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The geographic scope of consideration for GHG emissions is on a global scale as such emissions contribute, on a cumulative basis, to global climate change. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies evaluate the cumulative impacts of GHGs, even relatively small additions, on a global basis. By their nature, GHG evaluations under CEQA are a cumulative study. (See *Center for Biological Diversity v. California Department of Fish and Wildlife* [2015] 62 Cal.4th 204.)

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to greenhouse gas emissions if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

As stated in the CEQA Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, VII Greenhouse Gas Emissions). The CEQA Guidelines encourage but do not require lead agencies to adopt thresholds of significance (CEQA Guidelines, §15064.7). When developing these thresholds, and consistent with the December 2018 CEQA and Climate Change Advisory published by the California Office of Planning and Research (OPR 2018), the Guidelines allow lead agencies to develop their own significance threshold and/or to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence. Individual lead agencies may also undertake a case-by-case approach for the use of significance thresholds for projects consistent with available guidance and current CEQA practice (OPR 2018).

As DTSC has not established screening thresholds for GHG emissions, the analysis uses the applicable significance thresholds developed by the SCAQMD. The SCAQMD has adopted a significance threshold of 10,000 MT of CO₂e per year for industrial (stationary source) projects. The GHG CEQA Significance Threshold Stakeholder Working Group also recommended options for evaluating non-industrial projects, including thresholds for residential and commercial projects. These draft thresholds include a threshold 3,000 MT CO₂e per year for residential and commercial projects (SCAQMD 2008).

The proposed project type is closest to an industrial project (i.e., doesn't include residential and commercial land uses); therefore, this analysis compares the construction-related and operational emissions to the SCAQMD threshold of 10,000 MT CO₂e per year. The 10,000 MT CO₂e threshold was developed in 2008 and was intended to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to GHG emissions reduction goals of AB 32. However, the proposed project's remediation activities would begin in 2021; thus, construction-related GHG emissions should also be analyzed in the SB 32 statewide framework (which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels).

However, the SCAQMD has not adopted a threshold of significance consistent with SB 32 goals. To provide this additional information to put the project-generated GHG emissions in the appropriate statewide context, this analysis presumes that a 40 percent reduction in the SCAQMD's existing threshold (resulting in 6,000 MT CO₂e) is necessary to achieve the State's 2030 GHG reduction goal (which is a 40 percent reduction below 1990 GHG emissions levels). This analysis also reviewed guidelines used by other public agencies. For example, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has identified an annual threshold of 1,100 MT CO₂e for the construction phase of projects and a 10,000 MT CO₂e annual threshold for stationary source operational emissions (SMAQMD 2021). Although the SMAQMD recognizes that, although there is no known level of emissions that determines if a single project will substantially impact overall GHG emission levels in the atmosphere, a threshold must be set to trigger a review and assessment of the need to mitigate project GHG emissions. The threshold set by the SMAQMD was developed to allow lead agencies to assess the consistency of proposed projects with the AB 32 and SB 32 reduction goals. Therefore, this analysis utilizes the 1,100 MT CO₂e threshold developed by SMAQMD for the construction phase of all project types for conservative purposes.

It is not the intent of this CEQA document to cause the adoption of these thresholds as mass emissions limits for this or other projects, but rather to provide this additional information to put the project-generated GHG emissions in the appropriate statewide context.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Construction-related and operational GHG emissions were estimated using the methodology discussed earlier under Section 3, Air Quality.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis: Heavy-duty off-road equipment, materials transport, and worker commutes during construction of the proposed project would result in exhaust-related GHG emissions. Construction of the proposed project would result in the generation of approximately 315 metric tons of CO₂e.

Following construction, operational activities associated with the proposed project are anticipated to be limited to operation of a diesel generator (24 hours per day) to power an electric vacuum blower and one weekly visit by a technician. Table 8-1 summarizes the operational emissions and amortized construction GHG emissions associated with the proposed project.

As shown in Table 8-1, the construction-related and operational emissions of the proposed project would not exceed SCAQMD's adopted significance threshold of 10,000 MT CO₂e per year, the adjusted SB 32 threshold of 6,000 MT CO₂e per year, nor the SMAQMD annual thresholds of 1,100 and 10,000 MT CO₂e. Therefore, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

**Table 8-1
Estimated GHG Emissions**

Emissions Category	Metric Tons CO₂e
Construction ¹	315
Annual Operational Emissions – Mobile Sources	<1
Annual Operational Emissions – Diesel Generator	157
<i>Annual Operational Emissions Subtotal</i>	<i>158</i>
Total	473

Notes: Modeled by AECOM in 2021.

¹ Construction of the remediation activities are a short-term source of emissions. These emissions would cease following installation and completion of the proposed remedial actions.

Totals may not add due rounding.

Conclusion: Less Than Significant Impact.

- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: As discussed above, in response to AB 32 and SB 32, CARB has approved a series of Climate Change Scoping Plans and Scoping Plan updates. While the Scoping Plan updates do include measures that would indirectly address GHG emissions associated with construction and operational activities, including the phasing in of cleaner technology for diesel engine fleets (including construction equipment) and Low Carbon Fuel Standard, successful implementation of these measures predominantly depends on the development of laws and policies at the state level. As such, none of these statewide plans or policies constitutes a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. Thus, it is assumed that any requirements or policies formulated under the mandate of AB 32 and SB 32 that would be applicable to the project, either directly or indirectly, would be implemented consistent with statewide policies and laws.

In December 2017, The City of Torrance adopted the CAP. The CAP includes GHG reduction strategies grouped into five strategy areas: land use and transportation; energy efficiency; solid waste; urban greening; energy generation and storage. The CAP does not include strategies applicable to the remediation activities associated with the proposed project. Thus, the proposed project would not conflict with the City of Torrance CAP, AB 32 and SB 32 Scoping Plan; or any other relevant plans, policies, or regulations for the purpose of reducing GHG emissions. Therefore, the proposed project's contribution to cumulatively significant impacts to global climate change would not be considerable.

Conclusion: Less Than Significant Impact

References Used: 14, 21, 36, 38, 41, 43

9. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal:

- **The U.S. Department of Transportation (DOT):** The U.S. DOT regulates the transport of hazardous materials under Title 49 of the Code of Federal Regulations (CFR, Title 49). Title 49 prohibits the release of hazardous materials to the environment and requires all containers to meet strict standards for impact resistance, strength, and packing compatibility. In addition, Title 49 contains specific requirements for the training of drivers in inspection, operation of vehicles, loading and unloading of materials, the properties and hazards of the materials transported, and the use of vehicle controls and equipment, including operation of emergency equipment. The proposed project would be subject to DOT requirements related to the use, generation, storage, and disposal of hazardous wastes.

State:

- **Titles 22, 23, and 27 of the California Code of Regulations:** In California, Titles 22 and 23 of the California Code of Regulations (CCR) address hazardous materials and wastes. Title 22 defines, categorizes, and lists hazardous materials and wastes, including universal wastes. Title 23 addresses public health and safety issues related to hazardous materials and wastes, and it specifies disposal options. Title 27 of the CCR addresses

landfill closure standards and landfill-related public health and safety issues. The proposed RAP would be subject to requirements of this law related to the use, generation, storage, and disposal of hazardous wastes.

Local:

- **Contaminated Soil and Groundwater:** Under Water Code, Division 7, Section 13304 the Los Angeles RWQCB oversees investigation and mitigation of sites contaminated from USTs, wells, or other sources. Oversight by the Los Angeles RWQCB is not limited to specific pollutants or specific media but is focused on determining whether an unauthorized release may result in pollution of regional water bodies. In addition, SCAQMD Rule 1166 sets control requirements for volatile organic compound (VOC) emissions from excavating, grading, handling, or treating contaminated soil and SCAQMD Rule 1150 requires implementation of an approved Excavation Management Plan for excavations of landfill material. Requirements include development and approval of a mitigation plan, notification to SCAQMD, monitoring, and handling requirements for the contaminated soil.
- **Regulation 29, CFR, Section 19 10.120, Hazardous Waste Operations and Emergency Response:** The Los Angeles Fire Department (LAFD) regulates storage and disposal of hazardous materials through enforcement and education programs. The LAFD manages the Hazardous Waste Generator Inspection Program and California Accidental Risk Prevention (CalARP) Program, which requires facilities with greater than threshold levels of hazardous materials to file a hazardous materials inventory that includes storage locations and emergency contact information for the facility. The LAFD oversees the Hazardous Materials Inspection/Business Plan Program to monitor compliance with hazardous materials storage requirements. The Hazardous Materials Division also works with the LAFD to respond to chemical emergencies to ensure proper containment and clean up. Regulation 29, CFR, Section 19 10.120, Hazardous Waste Operations and Emergency Response, under the authority of the federal Occupational Safety and Health Administration (OSHA) and Cal/OSHA, outlines methods and requirements for workers who handle or are potentially exposed to hazardous wastes and materials.

The transportation of hazardous materials would be regulated by the U.S. Department of Transportation (USDOT), California Department of Transportation (Caltrans), and California Highway Patrol (CHP). Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.

ENVIRONMENTAL SETTING (BASELINE):

Environmental conditions requiring remediation in Area 1 consist of DNAPL releases to soil and Perched Zone groundwater. Driplene is a pyrolysis fuel oil-water emulsion liquid that was generated along with quench water during the thermal cracking process for ethylene production. The Heil Separator Area located in the eastern portion of the facility was utilized for the separation of the driplene from the quench water. Since implementation of enhanced DNAPL recovery in 2004 total VOC concentrations in Perched Zone groundwater have declined. Approximately 9 gallons of DNAPL have been removed; however, only limited quantities of DNAPL continue to slowly recover in monitoring wells MW-10 and -10R.

Environmental conditions requiring remediation in Area 2 and 3 consist of benzene plumes in the Perched Zone groundwater centered on monitoring well MW-17 in Area 2 and monitoring well MW-25 in Area 3. Although the source of the benzene plumes has not been fully determined, the observed plumes do coincide with a petroleum pipeline easement running north-south across the project site.

Environmental conditions requiring remediation in Area 2 consist of arsenic above its TCG in shallow soil. In Area 2, the remedy will consist of the implementation of the presumptive remedy of excavation and disposal for the arsenic-impacted soils and the establishment of ICs, through restrictive LUCs. Similar to Area 2, environmental conditions requiring remediation in Area 4 consist of naphthalene above its TCG in shallow soil.

In addition to the above identified contaminants, potential hazardous materials that will be used during construction in order to excavate and remove contaminated soils in Area 4. These materials include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, and cleaners. No acutely hazardous materials would be used or stored onsite during construction. Remedial activities include ISGS in Area 1, which would involve the emplacement of a permanganate-based amendment designed to promote the development of a mineral coating around the DNAPL, and an SVE system with horizontal wells to mitigate the potential vapor intrusion and/or off-site dissolved phase benzene groundwater impacts located in Area 2 and Area 3. Impacts associated with long-term operation and maintenance of the treatment plant would be the same as the current conditions, with the potential to improve conditions based on the success of the proposed remedial activity.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to hazardous and hazardous materials if it would:

- Create an acute or adverse public health hazard through the release of hazardous materials into the environment.
- Expose humans, wildlife, wildlife habitat, and the general environment to hazardous materials.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details). Historical investigations and sampling, along with ongoing groundwater monitoring analytical data have informed the following analysis.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use, or disposal of hazardous materials?

Impact Analysis: Project activities associated with the routine transport, use or disposal of hazardous materials that could create a hazard to the public include shallow excavation of impacted soil, installation of soil borings/SVE pilot test wells, gauging and sampling of groundwater monitoring wells, , and emplacement of a permanganate-based amendment via ISGS in order to promote the development of a mineral coating around the DNAPL. The remediation activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials would be transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment.

The remediation activities would involve the excavation of contaminated soil. The removal of this soil could result in exposing workers, the public, and the environment to hazardous materials. As described in the RAP, the existing site-specific Health and Safety Plan (HASP) will be updated by AECOM prior to initiating the planned investigative and remedial activities. The HASP will be prepared in accordance with current safety standards as defined by the USEPA, the Occupational Safety and Health Association (OSHA), and the National Institute of Occupational Safety and Health (NIOSH), and in accordance with guidelines set forth in Title 8 of the California Code of Regulations (CCR), Section 5192. The HASP will be employed during all remedial activities. The HASP is considered “evergreen” and it is expected to be frequently updated due to changing project site conditions and scope, therefore it was not included as an appendix to the RAP at this time, but will be made available for the DTSC to review prior to implementing a specific scopes of work such as excavation and disposal, or ISGS.

All waste disposal activities will be conducted in accordance with Federal and State waste management laws and regulations. Potential impacts from this process are considered less than significant.

Conclusion: Less Than Significant Impact.

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis: Should an accidental spill occur on the highway while transporting excavated soil, all DOT regulations for spills will be complied with. Potential receptors include anyone who comes in direct contact with the waste by way of direct skin contact or by ingesting the waste. If a spill occurs, the driver of the truck will notify the local authorities for implementation of clean-up activities. Since the trucks will be appropriately labeled, any waste spill clean-up workers will be able to adequately use the appropriate protective gear to deal with this waste. Additionally, the proposed SVE system is intended to mitigate the potential vapor intrusion and/or off-site dissolved phase benzene groundwater impacts.

Conclusion: Less Than Significant Impact.

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?

Impact Analysis: No existing or proposed school sites were identified within 0.5 mile of the site. The facility is surrounded by similar industrial uses and various commercial uses.

Conclusion: No Impact.

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis: The site is under a Voluntary Cleanup Agreement with the California EPA (Department of Toxic Substances Control Docket No. HAS 95/96-032). Previous studies have shown the Heil Separator Area to be impacted by Dripolene (naphthalene), perched groundwater impacted by benzene, and shallow soils impacted with naphthalene and arsenic. The project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Conclusion: No Impact.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Impact Analysis: The site is not located within an airport land use plan or within two miles of an airport.

Conclusion: No Impact.

- f. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: A Site Health and Safety Plan has been prepared and will be updated as needed prior to start of field activities. The Health and Safety Plan identifies the location of the nearest hospital where personnel are to be taken for treatment. Project activities will not interfere with or impair the implementation of any emergency response or evacuation plan.

Conclusion: No Impact.

- g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact Analysis: The site is not located in or near a wildland area. As such, the project would not expose people or structures to a significant risk related to wildland fires.

Conclusion: No Impact.

References Used: 2, 18

10. HYDROLOGY AND WATER QUALITY				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal:

- **Clean Water Act of 1977 (Including 1987 Amendments):** Sections 401, and 402: The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulates quality standards for surface waters. Under the CWA, the United States Environmental Protection Agency (USEPA) has implemented many pollution control standards for industries, as well as water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutants from a point source into navigable waters, unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained.

State:

- State of California Constitution prohibits the waste or unreasonable use of water, regulates the method of use and method of diversion of water and requires all water users to conserve and reuse available water supplies to the maximum extent possible.

- **Porter-Cologne Water Quality Control Act:** Porter-Cologne is California’s comprehensive water quality control law. The Porter-Cologne Act regulates both surface water and groundwater and gives the RWQCB authority to issue Waste Discharge Requirements to recycled water producers. This Act is promulgated in the California Code of Regulations Title 22. Title 22 includes requirements for treatment and reuse tertiary-treated recycled water projects throughout California. The Act also requires the adoption of water quality control plans (basin plans) by the RWQCBs for watersheds within their regions. The basin plans are reviewed triennially and amended as necessary by the RWQCB, subject to the approval of the California Office of Administrative Law, the SWRCB, and ultimately the USEPA. Moreover, pursuant to Porter-Cologne, these basin plans become part of the California Water Plan.
- **State Water Resources Control Board Policies:**
 - Recycled Water Policy (Resolution No. 2009-0011). With Resolution No. 2009-0011, the SWRCB adopted the Recycled Water Policy for the State of California. This policy encourages increased use of recycled water and local stormwater and requires local water. The policy specifically identifies the use of recycled water as having a beneficial impact because it supports the sustainable use of groundwater and/or surface water and substitutes for the use of potable water. It encourages local and regional water agencies to optimize their use of local water sources by emphasizing water recycling, water conservation, and the maintenance of supply infrastructure and use of stormwater (including dry-weather urban runoff). In addition, the policy requires and wastewater entities to develop a Salt and Nutrient Management Plan (SNMP) for the groundwater basins in California.
 - Anti-Degradation Policy (Resolution No. 68-16): Requires the RWQCB, in regulating the discharge of waste, to: (a) maintain existing high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in water quality less than that described in State or Regional Water Boards policies; and (b) require that any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters, must meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that: a) a pollution or nuisance will not occur and b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.
- **California Water Code:** The use of water in the state is governed by the California Water Code or Title 23 of the California Code of Regulations. Title 23 requires that water resources must be put to beneficial use to the fullest extent of which they are capable, and that the waste, unreasonable use, or unreasonable method of use of water is illegal. The conservation of water is encouraged as a reasonable and beneficial in the interest of the people and for the public welfare.

Local:

- **Los Angeles Regional Water Quality Control Board:** The SWRCB, with its regional water boards, is the primary agency responsible for implementing the CWA and issuing NPDES permits. The SWRCB carries out its water quality protection authority through the adoption of basin plans. These plans establish water quality standards for particular bodies of water. California water quality standards are composed of three parts: the designation of beneficial uses of water, water quality objectives to protect those uses, and implementation programs designed to achieve and maintain compliance with the water quality objectives. The Los Angeles RWQCB is responsible for enforcing the Los Angeles Basin Plan.
- **Los Angeles Basin Plan:** The Los Angeles Basin Plan establishes water quality objectives for constituents that could potentially cause an adverse effect or impact on the beneficial uses of water. Specifically, basin plans are designed to accomplish the following:
 1. Designate beneficial uses for surface and ground waters,
 2. Set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to California’s anti-degradation policy,
 3. Describe implementation programs to protect the beneficial uses of all water in the region, and
 4. Describe surveillance and monitoring activities to evaluate the effectiveness of the basin plans.

ENVIRONMENTAL SETTING (BASELINE):

The site-specific geology and hydrogeology consists of mixed sands, varying amounts of silt and clay, as well as two water bearing zones: the shallow Perched Zone groundwater zone and the deeper Gardena-Gage aquifer. as Detailed discussions of site geology and hydrogeology are provided in the *Phase II RI Report* (Montgomery Watson, 2000) and in the *Phase I Environmental Site Assessment* report for Parcels B and C (URS, 2010).

The Lynwood-Silverado aquifer lies at 300 to 600 feet bgs and has been extensively developed for water supply. A series of barrier injection wells is maintained west of the project site vicinity to prevent seawater encroachment into the Silverado aquifer system (DWR, 1961).

In February of 2018, the depth to water in the Perched Zone (perched water-bearing zone) wells ranged from 48.64 to 62.26 feet below top of casing (btoc) (groundwater elevation ranged from approximately 33.76 to 39.14 feet mean sea level [msl]). In all cases the observed Perched Zone groundwater fluctuations were generally within historically observed levels.

A review of groundwater monitoring reports from the nearby Torrance refinery to the east of the project site completed during the Phase I Environmental Site Assessment (URS, 2010) indicated that regional horizontal gradients vary widely within the Perched Zone beneath that site, and are influenced by mounding in several areas including near the City of Torrance Storm Water Basin. The Torrance refinery facility has numerous groundwater monitoring wells screened within the Perched Zone. Potentiometric surface maps included in the 2010 report (URS, 2010) show Perched Zone groundwater flow to the west, southwest, and south near the UCC site.

At the project site the top of the perching layer is typically encountered at a depth of about 55 to 60 feet bgs. At the Torrance refinery and the UCC Torrance facility the top of the perching layer is typically encountered at a depth of about 35 to 50 feet bgs. The combined subsurface data from these three sites supports with a high level of confidence that the perching layer is continuous throughout the area.

In February 2018 the depth to groundwater measured in the Gardena-Gage aquifer wells ranged from 82.82 to 92.91 feet btoc (groundwater elevation of 5.23 to 6.77 feet msl); groundwater elevations in February 2018 were approximately 0.41 to 0.81 foot higher relative to elevations measured during the monitoring event in September 2017. Compared to the observed fluctuations in the Perched Zone groundwater levels, the observed Gardena-Gage groundwater levels have generally increased since monitoring records began. Based on groundwater elevation data collected from the project site Gardena-Gage well network, the inferred general direction of groundwater flow in the Gardena-Gage aquifer was to the east. This general flow pattern has been seen in many historical events. The average calculated gradient using the February 2018 data is approximately 0.001 ft/ft.

Review of potentiometric surface maps for the Gardena-Gage well network at the Torrance refinery to the east of the project site show consistent groundwater flow to the east (URS, 2010). The Torrance refinery facility has numerous groundwater monitoring wells screened within the Gage-Gardena aquifer and is a much larger facility, so groundwater flow to the east is probably representative of general conditions for the Gardena-Gage aquifer in this area.

An evaluation of the fate and transport of the DNAPL was performed by MWH (MWH, 2000). The pool height necessary to penetrate the perching unit at the project site was calculated to be 140 to 410 feet (MWH, 2000). The maximum historical thickness of DNAPL measured in wells MW-05, -10, and -10R is 6.37 feet. Based on this analysis it is considered unlikely that DNAPL would penetrate through the perching layer and into the deeper Gardena-Gage aquifer. Since the DNAPL pool height at the project site has never been observed to be more than a few feet thick, DNAPL migration through the perching unit and into the Gardena-Gage aquifer is not likely.

The maximum (or peak) of potential naphthalene concentration in the Gardena-Gage aquifer was modeled to be about 18 micrograms per liter ($\mu\text{g/L}$) and was estimated to be reached in about 650 years. This predicted peak naphthalene concentration is approximately equal to the naphthalene notification level or health-based advisory of 17 $\mu\text{g/L}$ for drinking water as established by the California Division of Drinking Water, indicating that current naphthalene concentrations could persist in unsaturated soils essentially indefinitely, with little to no risk to the underlying Gardena-Gage aquifer.

Groundwater monitoring wells where DNAPL has been observed are limited to MW-05, -10, and -10R. Other LIF soundings and groundwater monitoring wells in the Heil Separator area have not encountered indications of DNAPL. Given the over 20-year history of monitoring in the Heil Separator area, there is a good level of confidence in the estimated lateral extent of DNAPL and ample evidence that the DNAPL is stable.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - (i) result in substantial erosion or siltation on- or off-site;
 - (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - (iv) impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

A Phase II RI Report and Phase I Environmental Site Assessment report for site geology at Parcels B and C was conducted and is included as an appendix to the proposed RAP. Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Analysis: During construction of the proposed project, soil disturbance associated with grading and excavation would increase the potential for sediment and pollution loading. Accidental discharge of waste products and water could occur during construction and operations. During construction, a Stormwater Pollution Prevention Plan and construction BMPs will be used to address the potential impacts on water quality, in compliance with the Construction General Permit (Order No. 2009- 2009-DWQ). The proposed project will not cause any changes to existing treatment plant operations.

The ISGS component of the remedy includes injection of permanganate into the subsurface to create a barrier and immobilize the Driplene. While the injection of permanganate is intended to improve groundwater quality rather than further degrade it, the injection will be conducted in accordance with a Waste Discharge Requirements (WDR) permit obtained from the Los Angeles Regional Water Quality Control Board (LARWQCB). The purpose of the WDR permit is to ensure that groundwater water quality will not be negatively affected.

The SVE component of the remedy would mitigate the potential vapor intrusion and/or off-site dissolved phase benzene groundwater impacts. As such, the proposed project would not violate any water quality standards or waste discharge requirements. The proposed components would instead improve surface and ground water quality and mitigate further degradation.

Conclusion: Less than Significant Impact.

- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin?

Impact Analysis: The proposed project is a continuation of previous remedial and monitoring activities. The observed Gardena-Gage groundwater levels have generally increased since monitoring records began. The ISGS component of the proposed project would involve the emplacement of a permanganate-based amendment designed to promote the development of a mineral coating around the DNAPL that is contaminating the project site. The maximum historical thickness of DNAPL measured in wells MW-05, -10, and -10R is 6.37 feet. Based on this analysis it is considered unlikely that DNAPL would penetrate through the perching layer and into the deeper Gardena-Gage aquifer. Since the DNAPL pool height at the project site has never been observed to be more than a few feet thick, DNAPL migration through the perching unit and into the Gardena-Gage aquifer is not likely and thus the ISGS component would not

penetrate the aquifer. Project activities will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Conclusion: No Impact.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on or off-site;

Impact Analysis: The project will not alter the existing drainage patterns of the site or area in a manner which will result in substantial erosion or siltation on- or off-site. The proposed project is not located on or near a stream or river.

Conclusion: No Impact.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite;

Impact Analysis: The site is not located within or adjacent to any natural drainage. Project activities will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

Conclusion: No Impact.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Impact Analysis: The proposed project will not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems. Construction activities are not expected to generate significant amounts of runoff water. BMPs will be utilized to control excess water during grading and construction. Project activities will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Conclusion: No Impact.

(iv) impede or redirect flood flows?

Impact Analysis: Project activities will not substantially alter the existing drainage pattern of the site in a manner that would impede or redirect flood flows. Drainage patterns in the immediate vicinity of active work areas may be temporarily altered to minimize work area flooding.

Conclusion: Less Than Significant Impact.

- d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: The site is not within a flood, tsunami, or seiche zone.

Conclusion: No Impact.

- e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: Project activities will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Conclusion: No Impact.

References Used: 2, 25

11. LAND USE AND PLANNING				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Land use and planning regulations are provided in the general plans and/or community plans adopted for the City of Torrance and the County of Los Angeles, as well as adopted regional planning documents.

ENVIRONMENTAL SETTING (BASELINE) :

The project site is zoned as “M2” (Heavy Manufacturing) and is surrounded by industrial and commercial properties for a radius of approximately 0.25 miles. All areas adjacent to the project are also zoned M2. The Burlington Northern and Santa Fe (BNSF) railroad right-of-way is immediately north of the project site. To the east is the City of Torrance stormwater retention basin and a storage facility with onsite parking lot. To the south are various manufacturing and commercial properties. To the west are various commercial properties as well. At a local level, according to the City of Torrance General Plan Land Use Policy, the project is designated as “I-BP” (Business Park); land uses adjacent to the project site are designated I-BP to the north, “I-LT” (Light Industrial) to the east, “PUB” (Public/Quasi-Public/Open Space) to the southeast, I-BP to the south, and I-BP to the west. According to the County of Los Angeles land use designations, the project site is designated as Industrial. Areas adjacent to the project site are designated Industrial and Commercial. The project site is the location of the UCC Torrance facility and all proposed project activities would occur within the boundaries of this property.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to land use if it would:

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No environmental studies were performed for this resource. Readily available information was reviewed for this assessment. Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Physically divide an established community?

Impact Analysis: Not applicable. The proposed project would be located within the existing UCC Torrance facility within designated areas of concern.

Conclusion: No Impact.

- b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis: The proposed project is a continuation of the existing land use and does not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project, adopted for the purpose of avoiding or mitigating an environmental effect.

Conclusion: No Impact.

References Used: 17, 18, 27

12. MINERAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal

No federal regulations related to mineral resources would be applicable to the proposed project.

State

- **Surface Mining and Reclamation Act of 1975:** The State Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board (SMGB) map areas throughout the State of California that contain regionally significant mineral resources. Aggregate mineral resources within the state are classified by the SMGB through application of the Mineral Resource Zone (MRZ) system. The MRZ system is used to map all mineral commodities within identified jurisdictional boundaries. The MRZ system classifies lands that contain mineral deposits and identifies the presence or absence of substantial sand and gravel deposits and crushed rock source areas (i.e., commodities used as, or in the production of, construction materials). The State Geologist classifies MRZs within a region based on the following factors:
 - MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
 - MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
 - MRZ-3: Areas containing mineral deposits for which the significance cannot be determined from available data.
 - MRZ-4: Areas where available information is inadequate for assignment of any other MRZ category.

Mining operations and mine reclamation activities are required to be performed in accordance with laws and regulations adopted by the SMGB. The State Department of Conservation’s Division of Mine Reclamation (DMR) oversees reclamation requirements.

Local

- **City of Torrance General Plan, Community Resources Element:** The Community Resources Element of the City of Torrance General Plan sets forth goals, objectives, and policies that build on current recreation, social services, and resource conservation programs. Natural resources within the City of Torrance include mineral resources; however, majority of the land within Torrance is classified as MRZ-1 and MRZ-3. A small strip of land, south of Pacific Coast Highway and east of Hawthorne Boulevard, is designated as MRZ-2.

ENVIRONMENTAL SETTING (BASELINE):

The proposed project is located within an MRZ-3 site, meaning an area containing mineral deposits for which the significance cannot be determined from available data. There are no active mines and two closed mines present located within one mile of the proposed project site. In addition, there are no oil wells or oil fields within or near the project area.¹ As discussed, the

majority of land within Torrance is classified as MRZ-1 and MRZ-3, with a small strip of land approximately 3.6 miles south of the project site designated as MRZ-2. No further analysis of mineral resources is deemed necessary.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to mineral resources if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally important mineral resources recovery site identified in a general plan, specific plan, or other land use plan.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis: The proposed project will not result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the State because the project site is not located an MRZ-2 site, meaning an area where significant mineral deposits are present, or where there is a high likelihood for their presence.

Conclusion: No Impact.

- b. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis: There are no known mineral resources at the proposed project site. Project activities will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Conclusion: No Impact.

References Used: 6, 10, 11, 46, 48

13. NOISE				
Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Any potential noise related to the proposed project would occur during the construction phase or implementation of the remedial actions on the project site. For construction work, the City’s Municipal Code limits the use of power construction tools or equipment for construction work adjacent to residential areas. Construction noise sources are regulated within the City’s Municipal Code Section 46.3.1 which prohibits construction activities involving the creation of noise beyond 50 decibels (db) as measured at property lines, except between the hours of 7:30 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. on Saturdays. Construction shall be prohibited on Sundays and Holidays observed by City Hall. The code effectively exempts construction noise occurring from 7:30 a.m. to 6:00 p.m. Monday through Friday from the 50 db limit. However, construction noise effects are nonetheless discussed in the document per CEQA.

ENVIRONMENTAL SETTING (BASELINE):

The project site is surrounded by industrial and commercial properties for a radius of approximately 0.25 mile. Nearby industrial properties include the Torrance Oil Refinery, as well as facilities for manufacturing and/or distributing paint, coolants, and compressed air. An existing hotel is located approximately 410 feet away from the project site, and residences are over 1,200 feet away. As such, the project site is not considered to be located adjacent to residential areas or other noise-sensitive uses. The project is located in a highly disturbed and developed, urbanized industrial and commercial area, immediately adjacent the active BNSF railroad. The City of Torrance General Plan Noise Element states that the BNSF railroad is an existing source of transportation-related noise, particularly when trains are actively traveling on the tracks.

A-weighted decibels, abbreviated dBA, are an expression of the relative loudness of sounds in the air as perceived by the human ear. The City’s General Plan states that for industrial land uses, noise exposure up to 70 dBA Community Noise Equivalent Level (CNEL) is normally acceptable, with several exceptions for noise that only occurs occasionally or intermittently. Existing noise in the project area primarily includes vehicle traffic, nearby industrial operations, construction projects, and BNSF railroad trains.

Ground-borne vibration consists of oscillatory waves that propagate from the source through the ground to adjacent buildings or other uses. Vibration from construction projects is typically a result of pile driving, soil compacting, and certain demolition activities. The most common source of existing vibration in the project area is truck and vehicle traffic on roadways, trains traveling along the BNSF railroad, major construction projects, and certain existing industrial operations.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

Applicable thresholds include the City of Torrance Municipal Code, which exempts construction activity from noise standards.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No technical noise study was performed or required for the proposed project.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would result in:

- a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis: The proposed construction activities would typically occur during the work week, Monday through Friday between the hours of 7:00 a.m. to 5:00 p.m. Project activities may produce temporary short-term increase in ambient noise levels at the project site. Noise levels would fluctuate depending on the type, number and duration of use of various pieces of construction equipment. Workers at the site will wear protective hearing devices. All work will be performed on-site.

The primary source of noise generated from the proposed project would be related to short-term excavation and construction activities. Noise during remedial activities would be consistent with noise levels in an industrial area. The project area is urbanized, industrial, and include an active railroad resulting in higher levels of existing ambient noise. Noise Best Management Practices (e.g., limiting traffic speed, using equipment with mufflers, earplugs, etc.) would ensure that project activities will not expose workers and people in the general vicinity of the proposed project to excessive noise. The City's Municipal Code exempts construction noise from the proposed project from the hours of 7:30 a.m. to 6:00 p.m. Monday through Friday. In addition, there are no noise-sensitive uses located directly adjacent to the project site. Any mobile noise from construction trucks traveling on adjacent roadways would be intermittent and consistent with noise in an existing industrial and commercial area. The hotel located to the southeast is currently exposed to louder mobile noise sources due to its location along the heavily traveled Prairie Avenue. Implementation or construction of the proposed project would not result in a substantial increase in ambient noise levels.

Conclusion: Less Than Significant Impact.

- b. Generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis: Project activities that produce temporary short-term increase in groundborne vibration or groundborne noise levels would be negligible. The types of construction equipment associated with remediation activities include excavators, loaders, and trucks. Workers at the site will wear protective hearing devices. All work will be performed on-site. In addition, there are no vibration-sensitive uses, such as fragile historic buildings or recording studios, located directly adjacent to the project site. Any minor vibration from construction trucks traveling on adjacent roadways would be intermittent and consistent with vibration in an existing industrial and commercial area. The hotel located to the southeast is currently exposed to minor vibration from trucks traveling adjacent along the heavily traveled Prairie Avenue. Implementation or construction of the proposed project would not result in a substantial increase in ambient noise levels.

Conclusion: Less Than Significant Impact.

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact Analysis: Project activities are not located within the vicinity of a private airstrip or within two miles of a public airport.

Conclusion: No Impact.

14. POPULATION AND HOUSING				
Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal

- **Executive Order 12898:** This order outlines federal actions to address environmental justice in minority populations and low-income populations. Executive Order 12898 states that agencies shall identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations. A new working group was created to develop strategies for programs and policies regarding minority and low-income populations to: promote enforcement of all health and environmental statutes, improve research and data collection in relation to health and environment, identify different patterns of consumption of natural resources, and ensure greater public participation.

State

No state regulations related to population and housing resources would be applicable to the proposed project.

Local

- **City of Torrance General Plan, Housing Element:** The Housing Element of the City of Torrance General Plan is designed to provide the City with a coordinated and comprehensive strategy for promoting the production of safe, decent, and affordable housing within the community. Residents of Torrance face issues with housing availability and affordability, as Torrance is an older City that is virtually built out, with limited land available for future residential development.

ENVIRONMENTAL SETTING (BASELINE):

The proposed project site is adjacent to industrial and commercial land uses. No residential land uses occur within the project site. The surrounding project area is urban and developed, with residential land uses west and south of the project site (west of Hawthorne Boulevard, south of Del Amo Boulevard).

The proposed project would not create a demand for housing or increase local population. Construction workers, equipment operators, and truck drivers would be from the local labor pool and would maintain their current residences.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to population and housing if it would:

- Induce substantial unplanned population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Induce substantial unplanned population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Analysis: The project would not propose new homes, businesses or infrastructure. The project would consist of remediation activities to address contamination impacts at the project site. Project activities would not directly or indirectly induce substantial unplanned population growth in the area.

Conclusion: No Impact.

- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: Project activities will occur on-site in an area designated for industrial land uses. The project would not impact surrounding areas designated for residential use. Therefore, the project would not displace existing people or housing.

Conclusion: No Impact.

References Used: 7, 16 27, 46

15. PUBLIC SERVICES				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Public services are provided and public facilities are maintained by the City of Torrance and the County of Los Angeles. Public services and facilities include fire and police protection, refuse collection, and parks and recreation facilities. No regulatory laws, ordinances, regulation, standards area applicable to this resource.

ENVIRONMENTAL SETTING (BASELINE):

All proposed project activities would be performed within four Areas for implementation off the RAP, contained within the UCC Torrance facility. Project activities would include initial excavations and installations, ongoing site activity related to operation and maintenance of the pilot system, additional investigations, possible expansions, and work plans associated with the SVE and ISGS remedies that would occur during that time period. No new habitable structures are proposed and no road closures are anticipated.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to public services if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public services.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No environmental studies were performed for this resource. Readily available information was reviewed for this assessment. Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- i. Fire protection?
- ii. Police protection?
- iii. Schools?
- iv. Parks?
- v. Other public facilities?

Impact Analysis: No road closures are anticipated for construction or operation of the proposed project. Thus, the probability for significant impact on emergency response services is minimal.

As described in Section 14, the proposed project would implement the proposed RAP in order to reduce the identified contaminants of concern concentrations in the soil, soil vapor, and groundwater to levels protective of human health and the environment, consistent with the current and anticipated future commercial/industrial worker uses of the property. No new habitable structures are proposed and the proposed project would not induce population growth. The proposed project would not cause any permanent adverse physical impacts to government facilities and would not cause the need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other public facilities.

Conclusion: No Impact.

References Used: 2

16. RECREATION				
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal

- **Quimby Act (AB 1191):** The Quimby Act (California Government Code Section 66477) was first established by the California Legislature in 1965. It set forth provisions in the State Subdivision Map Act for the dedication of parkland and/or payment of in-lieu fees as a condition of approval of certain types of residential development projects. The Quimby Act allows local agencies, such as the City of Los Angeles, to establish ordinances that require residential subdivision developers to pay impact fees, which can be used to purchase and develop land and/or recreational facilities.

State

No state regulations related to recreational resources would be applicable to the proposed project.

Local

- **Los Angeles County General Plan:** Los Angeles County has goals for acquisition and development of additional park land as follows:
 - Goal P/R 3: Acquisition and development of additional parkland:
 - Policy P/R 3.1: Acquire and develop local and regional parkland to meet the following County goals: 4 acres of local parkland per 1,000 residents in the unincorporated areas and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County.
 - Policy P/R 3.2: For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, work with developers to provide for local and regional parkland above and beyond their Quimby obligations.
 - Policy P/R 3.3: Provide additional parks in communities with insufficient local parkland as identified through the gap analysis.
 - Policy P/R 3.4: Expand the supply of regional parks by acquiring land that would: 1) provide a buffer from potential threats that would diminish the quality of the recreational experience; 2) protect watersheds; and 3) offer linkages that enhance wildlife movements and biodiversity.
 - Policy P/R 3.6: Pursue a variety of opportunities to secure property for parks and recreational facilities, including purchase, grant funding, private donation, easements, surplus public lands for park use, and dedication of private land as part of the development review process.

ENVIRONMENTAL SETTING (BASELINE):

According to the General Plan Land Use Policy Map created by the City of Torrance, there are two areas designated as Public/Quasi-Public/Open Space land uses within the vicinity of the project site. One area is a concrete-lined stormwater basin that exists on the east side of the project site. According to the Los Angeles County GIS-NET Public Mapper, the second area that exists approximately 0.1 miles north of the project site is labeled as a miscellaneous property. In addition, there are two parks for recreational use in the project vicinity: Columbia Park is approximately 0.3 miles north of the project site and Delthorne Park is approximately 0.2 miles south of the project site. The proposed project would be isolated from these recreational uses in the vicinity.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to recreational if it would result in:

- Permanent removal of substantial recreational areas and critical recreational facilities.
- Increased usage that would result in substantial physical deterioration of the recreational area or facility.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact Analysis: The proposed project's activities would occur within the project site, and there are no recreational uses within the project site. The project would implement a remedial action plan that would not increase the use of existing neighborhood and regional parks or other recreational facilities, or result in substantial physical deterioration of the recreation facilities.

Conclusion: No Impact.

- b. Does the project include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis: The project would not include recreational facilities or require the construction or expansion of recreational facilities. The project would implement a remedial action plan that would consist of remediation work within the project site, which has no recreational uses.

Conclusion: No Impact.

References Used: 17, 27

17. TRANSPORTATION				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

This section describes the federal, state, and local (City of Torrance and County of Los Angeles) policies and regulations that are pertinent to transportation.

Federal

- **Title 49, Code of Federal Regulations, Parts 171–177:** Title 49, Parts 171-177 governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles. The administering agencies for the above regulation are the California Highway Patrol (CHP) and the United States Department of Transportation (USDOT).

State

- **CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts]:** The Office of Planning Research (OPR) proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project’s transportation impacts. With the California Natural Resources Agency’s certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by “level of service” and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3))
- **California Vehicle Code (CVC), Sections 31303-31309:** Requires that the transportation of hazardous materials be on the state or interstate highway that offers the shortest overall transit time possible. The administering agency for the above statutes is the CHP.
- **The California Streets and Highways Code, Sections 660, 670, 672, 1450, 1460, 1470, 1480 et seq:** This code defines highways and encroachments, and requires encroachment permits for projects involving excavation in State Highways and County Roadways. This law is generally enforced at the local level. The administering agencies for this regulation are Caltrans, the Los Angeles County Department of Public Works, and the City of South El Monte. The Project would need to apply for encroachment permits for any excavation in state, county and City roadways prior to construction.
- **California Health and Safety Code, Section 25160 et seq:** This code addresses the safe transport of hazardous wastes, requires a manifest for hazardous waste shipments, and requires a person who transports hazardous waste in a vehicle to have a valid registration issued by the DTSC in their possession while transporting hazardous waste.

Local

- **City of Torrance General Plan Circulation and Infrastructure Element:** The Circulation and Infrastructure Element sets the direction for the development of a comprehensive, coordinated, and continuing transportation system for the City of Torrance. Mariner Avenue, the roadway within the project study area, is classified as a local street according to the Circulation and Infrastructure Element. A local street provides access to an area but is not

designed for through traffic. The Circulation and Infrastructure Element also addresses walkability and pedestrian facilities, trails, bicycle lanes and paths, and transit service.

- **City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects:** These guidelines address traffic analyses needed for development projects in the City of Torrance to meet CEQA standards.
- **City of Torrance Traffic Circulation Analysis Guidelines:** These guidelines provide information on the City of Torrance's traffic circulation analysis (TCA) requirements, adapted from Los Angeles County guidelines. If required, the project proponent would file a Traffic Control Plan with the County of Los Angeles and/or the City of Torrance prior to the start of construction. The Traffic Control Plan would be designed to allow for continued function of the roadway network allowing traffic, transit, bicycle, and pedestrian circulation through the area with minimal disruption. Traffic Control Plans must be designed by a Professional Engineer, and if deemed necessary, a Traffic Engineer, and must be approved by the local jurisdiction prior to implementation during the construction phase of the proposed project.
- **Los Angeles County Metro Active Transportation Strategic Plan:** This is a county-wide effort by the Los Angeles County Metropolitan Transportation Authority (LACMTA or Metro) to encourage the use of walking, bicycling, and transit through improvements.
- **Los Angeles County Metro 2014 Short Range Transportation Plan:** This ten-year plan identifies challenges and opportunities for improving public transportation, traffic, and sustainability within LA County.
- **Los Angeles County Metro 2020 Long Range Transportation Plan:** This comprehensive plan provides the framework for the future of transportation within Los Angeles County, by addressing economic equity and environmental concerns while reducing congestion.
- **Los Angeles County Metro Vision 2028 Plan:** This plan is an ambitious set of goals for Metro to improve Los Angeles County economically and socially by improving transportation.

ENVIRONMENTAL SETTING (BASELINE):

The project is located in the City of Torrance within a 37-acre area that UCC operated as a terminal and distribution center (the UCC Torrance facility). The 13.8-acre project site is accessed by roadway via Mariner Avenue and internal roadways, or by rail via the BNSF Railway Company's Harbor Subdivision and connecting railroad spurs. The project site is generally bounded by the Harbor Subdivision right-of-way on the north and northeast; freight spurs on the east and west; and office buildings and a surface parking lot on the south.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to recreational if it would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

This project consists solely of remediation activities and does not have an operational component. Therefore, the City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects is not applicable because this is not a development project.

The City of Torrance also requires a TCA under the City of Torrance Traffic Circulation Analysis Guidelines for projects that generate more than 500 trips per day. As discussed in more detail below, the project generates substantially fewer trips per day; therefore, a TCA is not required.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

The following scenarios were analyzed qualitatively as a part of this study:

- Existing Conditions – Establishes the current transportation conditions within the study area.
- Future No Project Conditions – Represents future No Project baseline conditions prior to project construction.
- Future Plus Project Construction Conditions – Represents the future No Project baseline conditions plus added traffic associated with project construction.

The traffic assessment prepared for this study was performed in context with applicable guidance from the updated Appendix G - CEQA checklist for Transportation. In addition, readily available information was reviewed for this assessment.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Impact Analysis: The project does not involve the construction of new facilities and consists solely of remediation activities. Table 17-1 summarizes the anticipated average and peak daily vehicle-trips (in passenger car equivalents, or PCEs) associated with each phase of the project. As shown in Table 17-1, the project would generate up to 312 vehicle-trips under fairly conservative assumptions for peaking and overlap, which would still fall well below the City of Torrance's 500-trip threshold for a TCA. During the weekday peak hours, the project would only generate a maximum of approximately 35 trips (weekday AM peak hour) during the peak overlap; vehicle-trips during the weekday PM peak hour would be substantially less.

Project activities would be performed on-site, and given the nature and volume of construction trip activity are not anticipated to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, and bicycle and pedestrian facilities. Short-term lane closures and other temporary traffic control measures may be implemented as part of a Traffic Control Plan, but would be designed to minimize impacts to traffic, transit, bicycle, and pedestrian circulation. Therefore, no impact would occur.

Table 17-1 Project Trip Generation

Activities	Number of Construction Workers (per day)		Number of Truck Round Trips (per day)		Daily One-Way Vehicle-Trips (PCEs)		Peak Weekday, Peak Hour Vehicle-Trips (PCEs)			
	Avg.	Peak	Avg.	Peak	Avg.	Peak	AM Peak Hour		PM Peak Hour	
							In	Out	In	Out
Excavation										
Workers ¹	5	8	—	—	10	16	2	0	0	2
Trucks ²	—	—	15	18	90	108	6	6	0	0
Total	5	8	15	18	100	124	8	6	0	2
SVE Pilot Testing – Well Installation										
Workers ¹	3	4	—	—	4	8	1	0	0	1
Trucks ²	—	—	19	24	114	144	8	8	0	0
Total	3	4	19	24	118	152	9	8	0	1
SVE Pilot Testing – System Install										
Workers ¹	6	8	—	—	8	16	2	0	0	2
Trucks ²	—	—	19	24	114	144	8	8	0	0
Total	6	8	19	24	122	160	10	8	0	2
ISGS Implementation										
Workers ¹	5	8	—	—	8	16	2	0	0	2
Total	5	8	—	—	8	16	2	0	0	2
Peak Overlap	9	12	38	48	240	312	19	16	0	3

Notes: The peak overlap is conservatively assumed to take place during the maximum sum of the peaks of any two consecutive phases—in this case, the well installation and system install phases of SVE pilot testing.

PCE = passenger car equivalent

- All construction workers are conservatively assumed to drive to the site (no reductions for transit, biking, walking, or other modes), with an average vehicle occupancy of 1.00 (i.e., drive alone). Up to 25 percent of worker commute trips are assigned to each of the weekday AM and PM peak hours, with the remainder assumed to arrive before the weekday AM peak hour and depart before the weekday PM peak hour.
- Truck trips include both haul truck trips (15 vehicles on average and 18 vehicles peak per day) and concrete mixer trucks (four vehicles on average and six vehicles peak per day). A passenger car equivalent (PCE) of 3.0 is applied to convert each truck to an equivalent of approximately three passenger cars. Up to ten percent of the daily truck traffic is assumed to be active during the weekday AM peak hour.

Conclusion: No Impact.

b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis: Subdivision (b) focuses on specific criteria for determining the significance of transportation impacts. The project does not involve the construction of new facilities and consists solely of remediation activities, and any truck traffic would be temporary. Project activities will be performed on-site and there will be minimal movement to and from the project area each day by construction workers' personal vehicles and trucks. Table 17-1 provides a detailed analysis of trip generation from this project. Any VMT associated with the project would only be in effect during the construction period and would not be recurring.

Conclusion: No Impact.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis: The project does not involve the construction of new facilities and consists solely of remediation activities; there would be no operational impacts. Based on a review of the study area including the project site and truck routes, the proposed project would not introduce any geometric design features other than short-term lane closures and other temporary traffic control measures that may be implemented as part of a Traffic Control Plan, which would be designed to minimize impacts to traffic, transit, bicycle, and pedestrian circulation. The project does not include permanent changes related to geometric design features or incompatible uses that could result in transportation-related hazards. Therefore, no impact would occur.

Conclusion: No Impact.

d. Result in inadequate emergency access?

Impact Analysis: The project does not involve the construction of new facilities and consists solely of remediation activities; there would be no operational impacts. Project activities will be performed on-site, and the temporary increase in traffic from personnel and equipment associated with project activities (as shown in Table 17-1) would be minimal. Based on a review of the study area including the project site and truck routes, the proposed project does not include any features or activities that would disrupt or inhibit emergency access. Short-term lane closures and other temporary traffic control measures may be implemented as part of a Traffic Control Plan, but would be designed to minimize impacts to traffic, transit, bicycle, and pedestrian circulation and would not prevent or substantially impede emergency vehicle access to / from or through the area. Therefore, no impact would occur.

Conclusion: No Impact.

References Used: 20, 22, 23, 28, 29, 30, 31

18. TRIBAL CULTURAL RESOURCES				
<p>Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission’s Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.</p>				
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>	<p>Potentially Significant Impact</p>	<p>Less Than Significant with Mitigation</p>	<p>Less Than Significant Impact</p>	<p>No Impact</p>
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Tribal cultural resources are defined in CEQA as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe, which may include non-unique archaeological resources previously subject to limited review under CEQA.

State:

- **Assembly Bill 52 Native American Consultation:** AB 52 requires the lead agency to begin consultation with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project prior to the release of a negative declaration or mitigated negative declaration if:
 1. The California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe; and
 2. The California Native American tribe responds, in writing, within 30 days of receipt of the formal notification and requests the consultation (Public Resources Code Section 21080.3.1[d]).

ENVIRONMENTAL SETTING (BASELINE):

The project site consists of an inactive terminal and distribution center. Approximately 80 percent of the 37-acre facility, including the project site, is covered with impervious structures consisting of buildings, roads, or paved areas. The UCC Torrance facility was built in 1956 for polyethylene manufacturing. The facility occupied approximately 100 acres. It operated until 1982, when the manufacturing operations were discontinued and much of the facility was decommissioned. Currently the facility is operated by UCC as a terminal and distribution center on approximately 37 acres. A review of the Sacred Lands File search, according to the Native American Heritage Commission (NAHC) (requested November 13, 2020 by DTSC Tribal Affairs) returned *negative* results (December 16, 2020) for the immediate area of the project site.

The NAHC also provided a list of eight Native American contacts representing the different Tribal groups historically and culturally affiliated with the geographic area of the site. The Office of Environmental Equity – Tribal Affairs sent Tribal engagement letters (February 3, 2021) to the eight identified contacts providing detailed information on the proposed remedial activities associated with the site. DTSC Tribal Affairs received no responses regarding interest or concerns associated with the project.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines and Public Resources Code Section 21074, the proposed project would have a significant impact to tribal cultural resources if it would cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically defined in terms the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- listed or eligible for listed in the California Register of Historical Resources, or in local register of historical resources as defined in Public Resources Code section 5020.1(k); or
- a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Section 15064.5 of the CEQA Guidelines defines “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in demolition or material alteration in an adverse manner of those physical characteristics of a resource that:

- conveys its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR;
- accounts for its inclusion in a local register of historical resources pursuant to Public Resources Code Section 5020.1(k) or its identification in a historical resources survey meeting the requirements of Public Resources Code Section 5024.1(g), unless the public agency reviewing the effects of the proposed project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- conveys its historical significance and that justify its eligibility for inclusion in the CRHR, as determined by a lead agency for purposes of CEQA

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details). A Cultural Resources Records Search was conducted by AECOM cultural resources specialists.

On November 13, 2020, DTSC’s Office of Environmental Equity submitted a Sacred Lands File search request to the Native American Heritage Commission, as well as a request for the list of project area Native American Tribal contacts. Subsequently, the DTSC Tribal Affairs Coordinator confirmed on April 14, 2021 that no Native American Tribes expressed any interest, concerns or requested further involvement regarding the proposed project.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Impact Analysis: The site is not listed or eligible for listing as a historical resource. Project activities will not cause a substantial adverse change in the significance of a tribal cultural resource. A review of the NAHC’s Sacred Lands File search indicates that Native American tribal cultural resources are not present in the immediate area of the project site.

Conclusion: No Impact.

- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis: No resource has been identified on-site. A review of the NAHC's Sacred Lands File search indicates that Native American tribal cultural resources are not present in the immediate area of the project site.

Conclusion: No Impact.

References Used: None.

19. UTILITIES AND SERVICE SYSTEMS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal

- **Clean Water Act:** The federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The City of Los Angeles is required to monitor water quality and conform to the regulatory requirements of the CWA.

State

- **Safe Drinking Water Act:** California enacted its own Safe Drinking Water Act (SDWA). Department of Health Services (DHS) has been granted primary enforcement responsibility for the SDWA. Title 22 of the California Administrative Code establishes CDHS authority and stipulates drinking water quality and monitoring standards. These standards are equal to or more stringent than the Federal standards.
- **Title 22:** The California Water Code requires the Department of Health Services (DHS) to establish water reclamation criteria. In 1975, the DHS prepared Title 22 to fulfill this requirement. Title 22 regulates production and use of reclaimed water in California by establishing three categories of reclaimed water: primary effluent, which typically includes grit removal and initial sedimentation or settling tanks; adequately disinfected, oxidized effluent (secondary effluent) which typically involves aeration and additional settling basins; and adequately disinfected, oxidized, coagulated, clarified, filtered effluent (tertiary effluent) which typically involves filtration and chlorination. In addition to defining reclaimed water uses, Title 22 also defines requirements for sampling and analysis of effluent and requires specific design requirements for facilities.
- **Urban Water management Planning Act:** The Urban Water Management Planning Act (California Water Code Division 6, Part 2.6 Sections 10610- 10656) was developed due to concerns over potential water supply shortages throughout California. It requires information on water supply reliability and water use efficiency measures. Urban water suppliers are required, as part of the Act, to develop and implement Urban Water Management Plans (UWMPs) to describe water supply, service area demand, population trends and efforts to promote efficient use and

management of water resources. An UWMP is intended to serve as a water supply and demand planning document that is updated to reflect changes in the water supplier's service area including water supply trends, and conservation and water use efficiency policies.

Local

- **City of Torrance Department of Water and Power UWMP:** The Department of Water and Power's UWMP is designed to meet the current requirements of the California Urban Water Management Planning Act, and it also serves as the City's master plan for water supply and resources management. The UWMP helps guide policy makers in the City, as well as provide important information to citizens of Torrance. While serving as a valuable resource for information, the UWMP provides the basic policy principles that will guide the Department of Water and Power's decision-making process to secure a sustainable water supply for the City of Torrance.
- **County of Los Angeles UWMP:** The County of Los Angeles 2015 UWMP was adopted on February 2017 and presents the county's current supply and demand situation along with an updated presentation of future supplies, demand forecasts and measures to monitor and control future demand. The 2015 UWMP, along with other water resource planning reports is used by County staff to guide the County's water use and management efforts.

ENVIRONMENTAL SETTING (BASELINE):

The project site consists of a terminal and distribution center. Approximately 80 percent of the 37-acre facility, including the project site, is covered with impervious structures consisting of buildings, roads, or paved areas. The UCC Torrance facility was built in 1956 for polyethylene manufacturing. The facility occupied approximately 100 acres. It operated until 1982, when the manufacturing operations were discontinued and much of the facility was decommissioned. Electric power to the facility is provided by Southern California Edison.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to energy and utilities if it would:

- Result in extensive disruptions to public utility services.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No environmental studies were performed for this resource. Readily available information was reviewed for this assessment. Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?

Impact Analysis: Project activities will not require or result in the relocation or construction of utilities and services.

Conclusion: No Impact.

- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis: Water use will be minimal and limited to active project activities. No water will be used after completion of the project.

Conclusion: Less Than Significant Impact.

- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis: Waste generated during project activities will be managed and disposed per regulatory requirements. No waste will be generated after completion of the project.

Conclusion: Less Than Significant Impact.

- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Impact Analysis: Waste generated during project activities will be managed and disposed per regulatory requirements. Excavated soils will be transported to and disposed of at the Clean Harbors Buttonwillow Landfill Facility. The Clean Harbors Buttonwillow Landfill Facility is located at 2500 West Lokern Road, Buttonwillow, California. The Buttonwillow Facility (EPA ID No. CAD 980675276) is a CERCLA-approved, RCRA permitted, Class I disposal facility that is permitted to accept the waste generated from the planned remedial excavation activities. No waste will be generated after completion of the project.

Conclusion: Less Than Significant Impact.

- e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis: The proposed project will comply with federal, state, and local statutes and regulations related to solid waste, both during construction and during on-going treatment plant operations. Excavated soils will be transported to and disposed of at the Clean Harbors Buttonwillow Landfill Facility. The Clean Harbors Buttonwillow Landfill Facility is located at 2500 West Lokern Road, Buttonwillow, California. The Buttonwillow Facility (EPA ID No. CAD 980675276) is a CERCLA-approved, RCRA permitted, Class I disposal facility that is permitted to accept the waste generated from the planned remedial excavation activities. No waste will be generated after completion of the project.

Conclusion: No Impact.

References Used: 2, 16

20. WILDFIRE				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

None applicable.

ENVIRONMENTAL SETTING (BASELINE):

The site is located in the City of Torrance within a M2 zone, as are all adjacent parcels. The proposed project is not located in areas that have been mapped within a Fire Hazard Severity Zone. In the event of a fire at the project site, the Torrance Fire Department would provide fire and emergency safety services.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to wildfire if it would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan.
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Impacts are more likely to occur in areas designated as susceptible to wildfires, or for project that would substantially impair an adopted emergency response plan or emergency evacuation plan.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No environmental studies were performed for this resource. Readily available information was reviewed for this assessment. Environmental investigation and remediation activities have been performed at the project site since 1972 (see Project Background section for additional details).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Project activities would occur within the existing UCC Torrance facility. No road closures are anticipated during construction or operation of the proposed project.

Conclusion: No Impact.

- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis: Not applicable. The site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.

Conclusion: No Impact.

- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact Analysis: Not applicable. The site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.

Conclusion: No Impact.

- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis: The proposed project sites and surrounding areas are relatively flat and are not located in areas that have been mapped as Fire Hazard Severity Zones. Therefore, downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes are unlikely.

Not applicable. The site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.

Conclusion: No Impact.

References Used: 2, 4, 46

21. MANDATORY FINDINGS OF SIGNIFICANCE**Based on evidence provided in this Initial Study, DTSC makes the following findings:**

- a. The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- b. The project does not have impacts that are individually limited but cumulatively considerable. (“Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
- c. The project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Authority: Public Resources Code 21083, 21094.5.5

Reference: Public Resources Code Sections 21094.5 and 21094.5.5

REFERENCES LIST

1. 1951. *Torrance, Calif.* 1:24,500 scale topographic map. Available: <https://ngmdb.usgs.gov/topoview/viewer>. Accessed March 20, 2021.
2. AECOM, 2021. Remedial Action Plan, Former Union Carbide Torrance Distribution Facility, 19500 Mariner Avenue, Torrance, CA. Revised January 20, 2021.
3. Bean, Lowell John, and Smith, Charles R., 1978. Gabrielino. In *California*, edited by Robert F. Heizer, pp 538-549. Handbook of the North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
4. CAL FIRE, California Fire Hazard Severity Zones.
<https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>
5. California Department of Conservation Division of Mines and Geology. 2002. A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos. Website: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf.
6. California Department of Conservation, Geologic Energy Management Division (CalGEM), Well Finder, search by address, website: <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal>, accessed August 24, 2020.
7. California Department of Conservation. 2017. Los Angeles County Important Farmland 2016, Division of Land Resource Protection, Farmland Mapping and Monitoring Program.
<https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx>
8. California Department of Fish and Game Natural Diversity Database, Rarefind Report, May 3, 2004 Torrance Quadrant.
9. California Department of Fish and Wildlife, Biogeographic Data Branch. 2021. California Natural Diversity Database (CNDDDB) – Commercial Version dated August 30, 2020. Available at: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed on 02 September 2020.
10. California Department of Technology, California State Geoportal, Oil and Gas Field Administrative Boundaries Map, website: <https://gis-california.opendata.arcgis.com/datasets/cadoc::oil-and-gas-field-administrative-boundaries-1>, accessed August 24, 2020.
11. California Native Plant Society, Rare Plant Program. 2021a. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.45). Website <http://www.rareplants.cnps.org> [accessed 16 March 2021].
———. Rare Plant Program. 2021b. CNPS Rare Plant Ranks. Available at: <http://cnps.org/rare-plants>. Accessed on: 16 March 2021.
12. Caltrans, California State Scenic Highway System Map, available at:
<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>
13. CARB (California Air Resources Board). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Available: <http://www.arb.ca.gov/ch/landuse.htm>.
14. CARB (California Air Resources Board). 2008. Climate Change Scoping Plan: A Framework for Change. Pursuant to AB 32 the California Global Warming Solutions Act of 2006. December 2008. Available: <https://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>.
———. 2012. California Greenhouse Gas Emission Inventory 2000–2012. Available: https://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-12_report.pdf.
———. 2017. 2017 Climate Change Scoping Plan. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

- _____. 2014. First Update to the AB 32 Climate Change Scoping Plan. May 2014. Available: <https://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>.
- _____. 2019a. California Waiver Timeline. Available: <https://ww2.arb.ca.gov/resources/documents/carb-waiver-timeline>.
- _____. 2020. California Greenhouse Gas Inventory for 2000–2018. Available: <https://ww2.arb.ca.gov/ghg-inventory-data>.
15. CDWR, 2002. Watermaster Service in the West Coast Basin, Los Angeles County.
 16. City of Torrance Department of Water and Power, UWMP, available at: <https://www.torranceca.gov/home/showdocument?id=5364>
 17. City of Torrance General Plan Land Use Element, Land Use Map, available at: <https://www.torranceca.gov/home/showpublisheddocument?id=2734>
 18. City of Torrance Zoning Map, available at: <https://www.torranceca.gov/home/showpublisheddocument?id=53871>
 19. City of Torrance, n.d. “Torrance History: Spanning the Years.” Available: <https://www.torranceca.gov/our-city/about-torrance/history>. Accessed: March 20, 2021.
 20. City of Torrance. “Traffic Circulation Analysis (TCA) Guidelines”. <https://www.torranceca.gov/our-city/public-works/civil-and-traffic-engineering/traffic-engineering/traffic-impact-analysis-guidelines>. Accessed March 25, 2021.
 21. City of Torrance. 2017. Climate Action Plan. Available: <https://www.torranceca.gov/home/showpublisheddocument?id=56796>.
 22. City of Torrance. *City of Torrance General Plan; Circulation and Infrastructure Element*. Adopted April 6, 2010. <https://www.torranceca.gov/home/showpublisheddocument?id=2718>. Accessed March 25, 2021.
 23. City of Torrance. *Traffic Impact Assessment Guidelines for Land Use Projects*. January 2021. <https://www.torranceca.gov/home/showpublisheddocument?id=63027>. Accessed March 25, 2021.
 24. Dibblee, T.W., Ehrenspeck, H.E., Ehlig, P.L., and Bartlett, W.L., 1999. *Geologic map of the Palos Verdes Peninsula and vicinity, Redondo Beach, Torrance, and San Pedro quadrangles, Los Angeles County, California*. Dibblee Foundation Map DF-70. Santa Barbara Museum of Natural History, Santa Barbara, California.
 25. Environmental Systems Research Institute, Inc. 2003. US Flood Hazard Areas.
 26. Kroeber, Alfred L., 1925 (reprinted 1976). Handbook of Indians of California. Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington D.C.
 27. Los Angeles County Department of Regional Planning, Planning and Zoning Information, available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public
 28. Los Angeles County Metropolitan Transportation Authority. *2014 Short Range Transportation Plan*. <https://www.metro.net/projects/short-range-transportation-plan/>. Accessed March 25, 2021.
 29. Los Angeles County Metropolitan Transportation Authority. *Active Transportation Strategic Plan*. April 2016. <https://www.metro.net/projects/active-transportation-strategic-plan/>. Accessed March 25, 2021.
 30. Los Angeles County Metropolitan Transportation Authority. *Metro Vision 2028 Strategic Plan*. <https://www.metro.net/about/metro-vision-2028-plan/>. Accessed March 25, 2021.
 31. Los Angeles County Metropolitan Transportation Authority. *Our Next LA; 2020 Long Range Transportation Plan*. <https://media.metro.net/2020/LRTP-2020-Final.pdf>. Accessed March 25, 2021.

32. Los Angeles Department of Regional Planning (LADRP). Significant Ecological Areas. Available at: http://planning.lacounty.gov/sea/regional_habitat_linkages_and_wildlife_corridors/. Accessed March 29, 2021.
33. McCandless, Michael H., n.d. Well at Least We Tried: The Seaport of Redondo Beach from 1888 to 1912. Available: <http://oocities.com/portredondo/index.htm>. Accessed March 20, 2021.
34. Montgomery Watson, 2000. Phase II Remedial Investigation Report for the Heil Separator Area, August 2000.
35. National Cooperative Soil Series, 2001. *Marina Series Soils*. United States Department of Agriculture. Available: https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MARINA.html. Accessed March 20, 2021.
36. National Highway Traffic Safety Administration (NHTSA). 2020. The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule. Available at: <https://www.nhtsa.gov/corporate-average-fuel-economy/safe>.
37. Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*. Available: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>.
38. Office of Planning and Research (OPR). 2018. CEQA and Climate Change Advisory. Available: http://opr.ca.gov/docs/20181228-Discussion_Draft_Climate_Change_Advisory.pdf.
39. Phase I Environmental Site Assessment (URS, 2010)
40. Racer, F.H., 1939. Site form for P-19-000100 (CA-LAN-100). On file at the South Central Coastal Information Center, California State University, Fullerton.
41. Sacramento Metropolitan Air Quality Management District (SMAQMD). 2021. Guide to Air Quality Assessment in Sacramento County. Available: <http://www.airquality.org/LandUseTransportation/Documents/Ch6GHGFinal5-2018.pdf>
42. South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology. Available: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.
- _____. 2016. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. Available: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caoqs-feb2016.pdf>.
- _____. 2017. 2016 Air Quality Management Plan. Available: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>.
- _____. 2019. SCAQMD Air Quality Significance Thresholds. Available: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.
- _____. 2020. Historical Data Tables By Year. Available: <https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year>.
43. South Coast Air Quality Management District (SCAQMD). 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. Available: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2).
44. State of California Department of Conservation, Department of Mines and Geology. State of California Seismic Hazard Zone Map for the Torrance CA, Quadrangle. March 25, 1999.
45. State of California Department of Conservation, Department of Mines and Geology. Alquist-Priolo Earthquake Map Zone Index. Website: http://www.consrv.ca.gov/cgs/rghm/ap/Map_index/F4D.html
46. Torrance, 2009. General Plan. Updated April 6, 2010. <https://www.torranceca.gov/our-city/community-development/general-plan/plan-2009>.

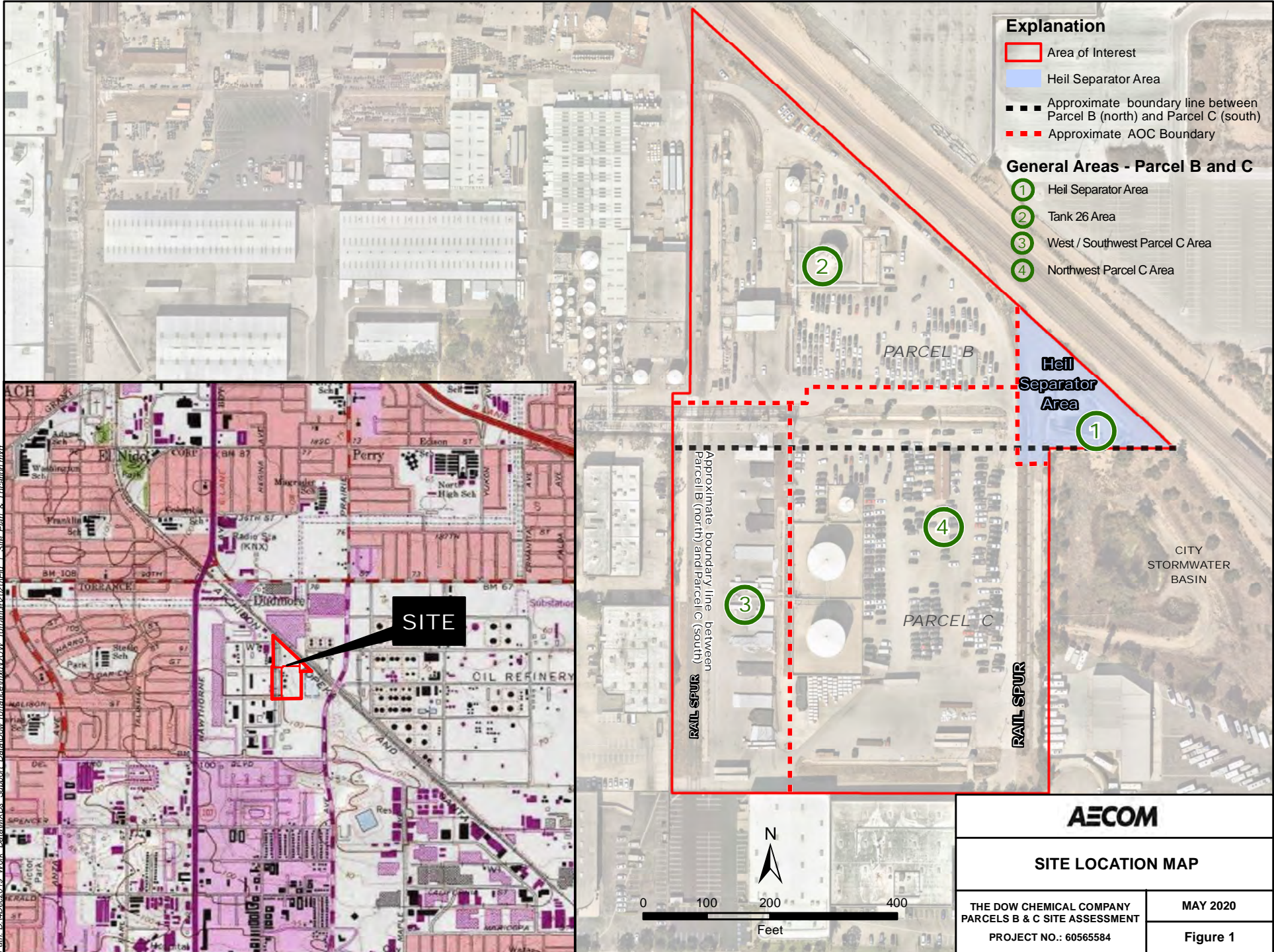
47. Torrance, 2009. *Living With Expansive Soils*. Website:
<https://www.torranceca.gov/home/showpublisheddocument?id=3116>
48. U.S. Department of the Interior, U.S. Geological Survey, Mineral Resources Data System (MRDS) website:
<https://mrdata.usgs.gov/mrds/>, accessed August 24, 2020.
49. U.S. Fish and Wildlife Service. 2021a. Information for Planning and Consultation (IPaC) Resource List, Sacramento County, California. Sacramento Fish and Wildlife Office. Report generated on 22 March 2021.

———. 2021b. National Wetlands Inventory (NWI) - Wetlands Mapper, Sierra Creek Park. Available: <http://www.fws.gov/wetlands/Data/Mapper.html>. Last updated May 1, 2020. Accessed 29 March 2021.

———. 2021c. Threatened & Endangered Species Active Critical Habitat Map. Available: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>. Last updated March 12, 2021. Accessed 29 March 2021.
50. U.S. Geological Survey. 2018a. Torrance.5-minute quadrangle map.

———. 2018b. Venice 7.5-minute quadrangle map.
———. 2018c. Inglewood 7.5-minute quadrangle map.
———. 2018d. South Gate 7.5-minute quadrangle map.
———. 2018e. Long Beach 7.5-minute quadrangle map.
———. 2018f. Long Beach OES 7.5-minute quadrangle map.
———. 2018g. San Pedro 7.5-minute quadrangle map.
———. 2018h. Redondo Beach OES 7.5-minute quadrangle map.
———. 2018i. Redondo Beach 7.5-minute quadrangle map.
51. United States Geological Survey (USGS), 1896. *Redondo, Calif.* 1:62,500 scale topographic map. Available: <https://ngmdb.usgs.gov/topoview/viewer>. Accessed March 20, 2021.
52. University of California, Davis, 2021. SoilWeb. Available: <https://casoilresource.lawr.ucdavis.edu/gmap/>. Accessed March 20, 2021.
53. URS, 2003a. *Focused Feasibility Study for the Heil Separator Area Union Carbide Distribution Facility a Wholly Owned Subsidiary of The Dow Chemical Company 19500 Mariner Avenue Torrance, California*. Prepared for Union Carbide Corporation. June 2003.
54. URS, 2003c. *Draft Task Specific Health and Safety Plan for Groundwater Monitoring Program at 19500 Mariner Avenue, Torrance California*. Prepared for The Dow Chemical Company. October 2003.
55. Zhu, Y., W. C. Hinds, S. Kim, and S. Shen. 2002. Study of Ultrafine Particles Near a Major Highway with Heavy-duty Diesel Traffic. *Atmospheric Environment* 36:4323–4335.

FIGURES



AECOM	
SITE LOCATION MAP	
THE DOW CHEMICAL COMPANY PARCELS B & C SITE ASSESSMENT	MAY 2020
PROJECT NO.: 60565584	Figure 1

Path: D:\12Dec2019_Work_Datal\MXDs_Support_Datal\DW_Tolerance\mxd\DW_Tolerance_V2019a\Fig_1_Site_Plan_Location.mxd
 Source: ESRI USA Topo Maps (National Geographi 2015)

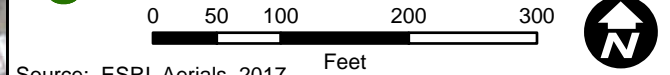


Explanation

- Area of Interest
- Heil Separator Area
- Background Soil Sampling Area
- Approximate boundary line between Parcel B (north) and Parcel C (south)
- Approximate AOC Boundary
- + Perched Zone Well
- + Gardena-Gage Well
- + qPCR Soil Sampling Location
- ▲ Previous Soil Boring (Historical)
- ⊗ 2005 CPT Locations
- 2007 Phase II Soil Sampling Location for metals, VOCs, SVOCs, PCBs, and PAHs
- * 2007 Phase II Soil Sampling Location for Metals only
- + 2007 Phase II Soil Sampling Location for VOCs and SVOCs only
- 2007 Phase II Groundwater and Soil Sampling Location
- 2007 Phase II Soil Gas Sampling Location
- + 2009-2010 Membrane Interface Probe Boring
- ⊗ 2009-2010 Laser-Induced Fluorescence Boring
- ▲ 2009 VOC Soil Gas Sampling Location
- 2013 Hydropunch Boring
- ▼ 2011 Soil Gas Sampling Location
- ⊗ 2011 Boring with Soil and Groundwater Sampling
- ⊕ 2012 Groundwater Monitoring/Remediation Well
- ⊗ 2012 Background Soil Sampling Location
- ▼ Soil Vapor Monitoring Location
- |—|— Cross Section Index Line

General Areas - Parcel B and C

- 1 Heil Separator Area
- 2 Tank 26 Area
- 3 West / Southwest Parcel C Area
- 4 Northwest Parcel C Area



Source: ESRI, Aerials, 2017.

AECOM

2018 SITE PLAN

THE DOW CHEMICAL COMPANY
PARCELS B & C SITE ASSESSMENT
PROJECT NO.: 60565584

JUNE 2018

FIGURE 2

Path: I:\Dow_Torrance\mxd\DOW_Torrance\2018\1qt\Fig_2_Site_Plan_1qt_2018.mxd

APPENDIX A

Air Quality, Greenhouse Gas, and Energy Modeling Output

DTSC UCC Torrance Torrance Distribution Facility RAP
Emissions and Energy Summary - Construction and Operations

Maximum Daily Construction-Related Emissions						
Year/Description	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	pounds per day					
2021	4.70	44.00	30.14	0.11	5.23	1.87
2022	2.02	16.08	17.89	0.05	0.87	0.62
Maximum Daily Emissions	4.70	44.00	30.14	0.11	5.23	1.87
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes: Fugitive dust emissions (PM10 and PM2.5) include reductions associated with SCAQMD Rule 403 fugitive dust control measures.

Maximum Daily Operational Emissions						
Source	Criteria Pollutant Emissions					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	pounds per day					
Mobile Source Emissions	0.00	0.01	0.07	0.00	0.01	0.00
Diesel Generator Emissions	1.85	9.65	7.45	0.01	0.81	0.81
Total	1.85	9.66	7.52	0.01	0.82	0.82
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Annual GHG Emissions		
Source	MT CO2e/year	
Construction	314.96	157.81
Mobile	0.48	
Stationary (Diesel Generator)	157.33	
Total	472.77	

Project Energy Requirements			
Phase	Energy Requirement	Unit	Annual Energy Consumption (MMBtu)
Construction (Off-Road and On-Road Equipment Fuel Usage)			
Diesel	992	Gallons/yr	137
Gasoline	43	Gallons/yr	5
		Subtotal	142
Operation (Diesel Generator and Weekly Maintenance Trip)			
Diesel	15,410	Gallons/yr	2,128
Gasoline	55	Gallons/yr	7
		Subtotal	2,135
		Total	2277

Category	Amount	Units
Diesel (heat content)	5.8	MMBtu/barrel
Motor Gasoline	5.25	MMBtu/gallon
Gallons per Barrel	42	gallons/barrel

Source:
The Climate Registry (April 2020): 2020 Default Emission Factors: <https://www.theclimateregistry.org/wp-content/uploads/2020/04/The-Climate-Registry-2020-Default-Emission-Factor-Document.pdf>

Operational - Mobile Sources

Project Operations On-Road Vehicles	Days/Year	Daily Trips	Trip Distance (One-way)	Total Trips/Year	Total VMT/Year	Emissions (lbs/day)										Emissions (MT/year)			MT/year	
						VOC	NOx	CO	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O	CO ₂	CH ₄	N ₂ O	CO ₂ e		
Weekly SVE System O&M Trip																				
Workers - Running Exhaust	52	2	14.7	104	1,529	0.0011	0.0042	0.0581	0.0002	0.0098	0.0029	19.9325	0.0003	0.0004	0.47	0.00	0.00	0.473164		
Workers - Starting Exhaust	52	2	14.7	104	1,529	0.0012	0.0010	0.0104	0.0000	0.0000	0.0000	0.2693	0.0003	0.0001	0.01	0.00	0.00	0.007369		
					Total	0.0023	0.0052	0.0685	0.0002	0.0098	0.0029	20.2019	0.0005	0.0005	0.4765	0.0000	0.0000	0.4805		

Notes:
 Assumes one technician will be needed to operate the system (one visit per week on average).
 Trip length based on CalEEMod default for Los Angeles - South Coast H-W Trip Length

	Emissions Factors (g/mi for RunEx, BW, TW and g/trip for StartEx)									
	VOC	NOx	CO	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O	
Workers - Running Exhaust	0.0174	0.0648	0.8966	0.0030	0.1506	0.0450	307.5248	0.0042	0.0063	
Workers - Starting Exhaust	0.2755	0.2296	2.3615	0.0006	0.0019	0.0018	61.0848	0.0591	0.0278	

Notes:
 PM emission factors include reentrained road dust emissions from travel on paved roads.

Conversion Units	
lbs	tons
2000	1
lbs	grams
1	453.592
metric ton	grams
1	1000000
GWP CO2e	CH4
25	1
GWP CO2e	N2O
298	1

Energy - Fuel Consumption

Construction Fuel Consumption, Total and Amortized over 30 Years				
Source	MT CO ₂ e/yr ^a	Fuel Type	Factor (MT CO ₂ /gallon) ^b	Gallons/year
Offroad Equip	281	Diesel	0.01021	27,520
Hauling	6	Diesel	0.01021	579
Vendor	17	Diesel	0.01021	1,649
Worker	11	Gas	0.00878	1,279
Total Gallons			Diesel	29,748
			Gasoline	1,279
Amortized Demands (over 30 years)			Diesel	992
			Gasoline	43

Annual Operational Fuel Consumption				
Source	MT CO ₂ e/yr ^a	Fuel Type	Factor (MT CO ₂ /gallon) ^b	Gallons/year
Diesel Generator	157	Diesel	0.01021	15,410
Worker	0.48	Gas	0.00878	55
Total Gallons			Diesel	15,410
			Gasoline	55

Notes:

Assumed amortization period is 30 years.

Sources:

^a Modeled by AECOM in 2021;

^b U.S. Energy Information Administration 2016 (https://www.eia.gov/environment/emissions/co2_vol_mass.php)

EMFAC2017 (v1.0.2) Emission Rates

Region Type: County

Region: LOS ANGELES

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population	VMT	%	ROG_RUNEX	NOx_RUNEX	CO_RUNEX	SOx_RUNEX	PM10_RUNEX	TW, BW	PM2.5_RUNEX	TW, BW	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX
LOS ANGELES	2022	LDA	Aggregate	GAS	4040505	154312636.5	58%	0.012141235	0.041229513	0.740277738	0.002741895	0.046509595	0.0193679	277.0763818	0.003115905	0.004667654			
LOS ANGELES	2022	LDA	Aggregate	DSL	35580.71	1405948.594	1%	0.021316202	0.078392403	0.295170252	0.002034089	0.054637338	0.027209609	215.1665295	0.000990097	0.033821041			
LOS ANGELES	2022	LDA	Aggregate	ELEC	79346.02	3237232.352	1%	0	0	0	0	0	0.047500013	0.017750005	0	0	0	0	0
LOS ANGELES	2022	LDT1	Aggregate	GAS	466456.3	17402686.02	7%	0.034885027	0.121934783	1.473879763	0.00317927	0.047434331	0.020218289	321.2743755	0.00785429	0.008943923			
LOS ANGELES	2022	LDT1	Aggregate	DSL	276.3593	6755.981354	0%	0.192807307	1.047583179	1.126374272	0.00441052	0.189614934	0.156348133	466.5441636	0.008955531	0.073334246			
LOS ANGELES	2022	LDT1	Aggregate	ELEC	3550.873	146697.1661	0%	0	0	0	0	0	0.044750013	0.017750005	0	0	0	0	0
LOS ANGELES	2022	LDT2	Aggregate	GAS	1395328	52851239.49	20%	0.020886913	0.087156018	1.039507011	0.003412169	0.046639737	0.019487593	344.8094676	0.005064174	0.00707987			
LOS ANGELES	2022	LDT2	Aggregate	DSL	9029.026	384253.17	0%	0.02311105	0.048315096	0.190884192	0.002765441	0.051136603	0.023860314	292.5279299	0.001073464	0.045981317			
LOS ANGELES	2022	LDT2	Aggregate	ELEC	14572.88	476540.0157	0%	0	0	0	0	0	0.047500013	0.017750005	0	0	0	0	0
LOS ANGELES	2022	MDV	Aggregate	GAS	941584.3	33063464.21	13%	0.029007403	0.116563148	1.254145573	0.004190259	0.046769711	0.019607436	423.437712	0.006765418	0.008950844			
LOS ANGELES	2022	MDV	Aggregate	DSL	19913.35	791156.8054	0%	0.015821117	0.047434429	0.278117269	0.003579594	0.050104049	0.022872428	378.6489396	0.000734861	0.05951834			
LOS ANGELES	2022	MDV	Aggregate	ELEC	7529.633	254507.8273	0%	0	0	0	0	0	0.044750013	0.017750005	0	0	0	0	0
					264333118.1			0.0173883	0.0647588	0.8966160	0.0030420	0.0466660	0.0195148	307.5247978	0.0042041	0.0062756			

Starting Exhaust

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population	Trips	%	ROG_STREX	NOx_STREX	CO_STREX	SOx_STREX	PM10_STREX	PM2.5_STREX	CO2_STREX	CH4_STREX	N2O_STREX	
LOS ANGELES	2022	LDA	Aggregate	GAS	4040505	19063483.35	58%	0.230912513	0.187910244	2.164371988	0.000543132	0.001893757	0.001741315	54.88501053	0.051329856	0.025680827		
LOS ANGELES	2022	LDA	Aggregate	DSL	35580.71	168445.7609	1%	0	0	0	0	0	0	0	0	0	0	0
LOS ANGELES	2022	LDA	Aggregate	ELEC	79346.02	396260.3789	1%	0	0	0	0	0	0	0	0	0	0	0
LOS ANGELES	2022	LDT1	Aggregate	GAS	466456.3	2155709.822	7%	0.359885965	0.259872502	2.292245822	0.000632046	0.002655673	0.002441972	63.87002054	0.071790333	0.028653774		
LOS ANGELES	2022	LDT1	Aggregate	DSL	276.3593	979.1709586	0%	0	0	0	0	0	0	0	0	0	0	0
LOS ANGELES	2022	LDT1	Aggregate	ELEC	3550.873	17760.7296	0%	0	0	0	0	0	0	0	0	0	0	0
LOS ANGELES	2022	LDT2	Aggregate	GAS	1395328	6550846.129	20%	0.32052	0.286094625	2.698532418	0.000688501	0.001922184	0.001767443	69.57498521	0.068746375	0.032324224		
LOS ANGELES	2022	LDT2	Aggregate	DSL	9029.026	44544.01587	0%	0	0	0	0	0	0	0	0	0	0	0
LOS ANGELES	2022	LDT2	Aggregate	ELEC	14572.88	73737.31066	0%	0	0	0	0	0	0	0	0	0	0	0
LOS ANGELES	2022	MDV	Aggregate	GAS	941584.3	4363838.4	13%	0.413882515	0.355959495	3.204228544	0.000848865	0.002122071	0.00195158	85.78024618	0.083702607	0.035519825		
LOS ANGELES	2022	MDV	Aggregate	DSL	19913.35	97958.74485	0%	0	0	0	0	0	0	0	0	0	0	0
LOS ANGELES	2022	MDV	Aggregate	ELEC	7529.633	38504.20314	0%	0	0	0	0	0	0	0	0	0	0	0
					32972068.01			0.2755	0.2296	2.3615	0.0006	0.0019	0.0018	61.0848	0.0591	0.0278		

Paved Roads Fugitive Dust Emissions

Paved Roads	100%
-------------	------

Paved Road Dust $EF_{DUST} = [(k(sL)^{0.91} \times (W)^{1.02})(1 - P/4N)]$

Source: AP-42 Section 13.2.1 (Paved Roads) - <http://www.epa.gov/ttnchie1/ap42/ch13/final/c13s0201.pdf>

Variable	Value	Description
k (PM10)	0.0022	particle size multiplier for particle size range and units of interest (lb/VMT)
k (PM2.5)	0.00054	particle size multiplier for particle size range and units of interest (lb/VMT)
sL	0.032	road surface silt loading (g/m ²) based on EPA 2011 default for collector streets (https://ww3.arb.ca.gov/ei/areasrc/fullpdf/full7-9_2016.pdf)
W	2.40	average weight of personal, light-duty vehicle
P	33	number of "wet" days with at least 0.254 mm of precipitation during the averaging period (CalEEMod Appendix D)
N	365	number of days in averaging period

All Vehicle Trip Types

EF (PM10)	0.103910906	g/mi
EF (PM2.5)	0.025505404	g/mi

Conversion Units	
lbs	tons
2000	1
lbs	grams
1	453.592

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

Former UCC Torrance Distribution Facility Remediation Project
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	13.80	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	534	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

Project Characteristics - Update CO2 intensity per SCE 2019 Sustainability Report.

Land Use - Based on 13.8 site acreage.

Construction Phase - Based on project specific construction schedule.

Off-road Equipment - Project specific equipment. Off-highway trucks to account for end dump transport truck.

Off-road Equipment - Project specific equipment. Off-highway trucks to account for cement mixing truck, truck mounted drill rig, and hollow-stem auger drill rig CME-85.

Off-road Equipment - Project specific equipment. Other material handling equip to account for mixing trailer. Off-highway truck to account for truck mounted drill rig.

Off-road Equipment - Project specific equipment. Off-highway trucks to account for truck mounted drill rig, hollow-stem CME 85, and cement mixing truck.

Grading - Assumes approximately 150 CY material export and 200 CY material import.

Off-road Equipment - Equipment accounted for other Soil Excavations phase. Placeholder phase to account for export trips.

Trips and VMT - Vendor trucks to account for use of water truck throughout construction and equipment deliveries/removal from site at the beginning/end of each phase. Vendor trips also include well installation and concrete pour trips. Trip length for export haul truck trips based on proposed haul truck route to Buttonwillow to edge of SCAQMD air district boundary.

Vehicle Trips - Assumes one visit, on average, per week.

Energy Use -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps - SVE system equipped with an electric vacuum blower. Electric blower will be powered using a diesel generator (35 KW), 24 hrs/day.

Construction Off-road Equipment Mitigation - Assumes implementation of Rule 403 Fugitive Dust Control.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	11.00
tblConstructionPhase	NumDays	30.00	11.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	PhaseEndDate	7/23/2021	5/17/2021
tblConstructionPhase	PhaseEndDate	6/11/2021	9/1/2021

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

tblConstructionPhase	PhaseStartDate	6/12/2021	5/3/2021
tblConstructionPhase	PhaseStartDate	5/29/2021	7/1/2021
tblGrading	AcresOfGrading	0.00	75.00
tblGrading	MaterialExported	0.00	150.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LotAcreage	0.00	13.80
tblOffRoadEquipment	HorsePower	402.00	164.00
tblOffRoadEquipment	HorsePower	402.00	164.00
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	534

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CO_EF	4.10	4.10
tblStationaryGeneratorsPumpsEF	NOX_EF	5.32	5.32
tblStationaryGeneratorsPumpsEF	PM10_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	47.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	24.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8,760.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	85.00
tblTripsAndVMT	HaulingTripNumber	25.00	40.00
tblTripsAndVMT	HaulingTripNumber	19.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblVehicleTrips	WD_TR	0.00	2.00

2.0 Emissions Summary

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Stationary	1.8509	9.6526	7.4512	8.9000e-003		0.8129	0.8129		0.8129	0.8129		946.9719	946.9719	0.1328		950.2911
Total	1.8509	9.6526	7.4513	8.9000e-003	0.0000	0.8129	0.8129	0.0000	0.8129	0.8129		946.9722	946.9722	0.1328	0.0000	950.2913

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Stationary	1.8509	9.6526	7.4512	8.9000e-003		0.8129	0.8129		0.8129	0.8129		946.9719	946.9719	0.1328		950.2911
Total	1.8509	9.6526	7.4513	8.9000e-003	0.0000	0.8129	0.8129	0.0000	0.8129	0.8129		946.9722	946.9722	0.1328	0.0000	950.2913

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Soil Excavations	Grading	5/3/2021	5/17/2021	5	11	
2	SVE Pilot System Construction	Site Preparation	7/1/2021	9/1/2021	5	45	
3	ISGS Barrier Construction	Site Preparation	4/1/2022	6/1/2022	5	44	
4	Expansion of SVE System	Site Preparation	7/1/2022	9/1/2022	5	45	
5	Soil Excavations Export Trips	Grading	5/3/2021	5/17/2021	5	11	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
ISGS Barrier Construction	Rubber Tired Dozers	0	0.00	247	0.40
Expansion of SVE System	Rubber Tired Dozers	0	0.00	247	0.40
ISGS Barrier Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Soil Excavations	Excavators	1	10.00	158	0.38
Expansion of SVE System	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Soil Excavations	Rubber Tired Loaders	1	10.00	203	0.36
Soil Excavations	Off-Highway Trucks	5	10.00	402	0.38
SVE Pilot System Construction	Off-Highway Trucks	1	10.00	402	0.38
SVE Pilot System Construction	Off-Highway Trucks	1	10.00	164	0.38
SVE Pilot System Construction	Excavators	1	10.00	158	0.38
Soil Excavations	Rubber Tired Dozers	0	0.00	247	0.40

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

SVE Pilot System Construction	Off-Highway Trucks	1	10.00	402	0.38
Soil Excavations	Graders	0	0.00	187	0.41
Soil Excavations	Tractors/Loaders/Backhoes	0	0.00	97	0.37
ISGS Barrier Construction	Off-Highway Trucks	1	10.00	402	0.38
SVE Pilot System Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
SVE Pilot System Construction	Rubber Tired Dozers	0	0.00	247	0.40
Soil Excavations	Scrapers	0	0.00	367	0.48
ISGS Barrier Construction	Forklifts	1	10.00	89	0.20
ISGS Barrier Construction	Other Material Handling Equipment	1	10.00	168	0.40
Expansion of SVE System	Off-Highway Trucks	1	10.00	402	0.38
Expansion of SVE System	Off-Highway Trucks	1	10.00	164	0.38
Expansion of SVE System	Excavators	1	10.00	158	0.38
Expansion of SVE System	Off-Highway Trucks	1	10.00	402	0.38
Soil Excavations Export Trips	Excavators	0	0.00	158	0.38
Soil Excavations Export Trips	Graders	0	0.00	187	0.41
Soil Excavations Export Trips	Rubber Tired Dozers	0	0.00	247	0.40
Soil Excavations Export Trips	Scrapers	0	0.00	367	0.48
Soil Excavations Export Trips	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Soil Excavations Export Trips		0	0.00		

Trips and VMT

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
ISGS Barrier Construction	3	16.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SVE Pilot System Construction	4	16.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Excavations	7	16.00	2.00	40.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Expansion of SVE System	4	16.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Excavations Export Trips	0	0.00	0.00	30.00	14.70	6.90	85.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Soil Excavations - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2327	0.0000	7.2327	0.7811	0.0000	0.7811			0.0000			0.0000
Off-Road	4.5021	40.4175	28.6153	0.0968		1.4982	1.4982		1.3784	1.3784		9,372.5415	9,372.5415	3.0313		9,448.3232
Total	4.5021	40.4175	28.6153	0.0968	7.2327	1.4982	8.7310	0.7811	1.3784	2.1594		9,372.5415	9,372.5415	3.0313		9,448.3232

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.2 Soil Excavations - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0311	0.9874	0.2425	2.7900e-003	0.0636	3.0400e-003	0.0666	0.0174	2.9100e-003	0.0203		302.4666	302.4666	0.0216		303.0072
Vendor	6.3800e-003	0.1938	0.0562	5.0000e-004	0.0128	4.1000e-004	0.0132	3.6900e-003	3.9000e-004	4.0800e-003		53.4691	53.4691	3.4500e-003		53.5554
Worker	0.0763	0.0522	0.5892	1.7200e-003	0.1788	1.4500e-003	0.1803	0.0474	1.3300e-003	0.0488		171.5602	171.5602	5.0500e-003		171.6864
Total	0.1137	1.2333	0.8879	5.0100e-003	0.2552	4.9000e-003	0.2601	0.0686	4.6300e-003	0.0732		527.4959	527.4959	0.0301		528.2490

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2547	0.0000	3.2547	0.3515	0.0000	0.3515			0.0000			0.0000
Off-Road	4.5021	40.4175	28.6153	0.0968		1.4982	1.4982		1.3784	1.3784	0.0000	9,372.5415	9,372.5415	3.0313		9,448.3232
Total	4.5021	40.4175	28.6153	0.0968	3.2547	1.4982	4.7530	0.3515	1.3784	1.7298	0.0000	9,372.5415	9,372.5415	3.0313		9,448.3232

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.2 Soil Excavations - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0311	0.9874	0.2425	2.7900e-003	0.0636	3.0400e-003	0.0666	0.0174	2.9100e-003	0.0203		302.4666	302.4666	0.0216		303.0072
Vendor	6.3800e-003	0.1938	0.0562	5.0000e-004	0.0128	4.1000e-004	0.0132	3.6900e-003	3.9000e-004	4.0800e-003		53.4691	53.4691	3.4500e-003		53.5554
Worker	0.0763	0.0522	0.5892	1.7200e-003	0.1788	1.4500e-003	0.1803	0.0474	1.3300e-003	0.0488		171.5602	171.5602	5.0500e-003		171.6864
Total	0.1137	1.2333	0.8879	5.0100e-003	0.2552	4.9000e-003	0.2601	0.0686	4.6300e-003	0.0732		527.4959	527.4959	0.0301		528.2490

3.3 SVE Pilot System Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.1838	18.9364	17.6676	0.0462		0.7686	0.7686		0.7071	0.7071		4,467.6884	4,467.6884	1.4449		4,503.8120
Total	2.1838	18.9364	17.6676	0.0462	0.0000	0.7686	0.7686	0.0000	0.7071	0.7071		4,467.6884	4,467.6884	1.4449		4,503.8120

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.3 SVE Pilot System Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0447	1.3564	0.3931	3.5000e-003	0.0896	2.8700e-003	0.0925	0.0258	2.7400e-003	0.0286		374.2837	374.2837	0.0242		374.8878
Worker	0.0763	0.0522	0.5892	1.7200e-003	0.1788	1.4500e-003	0.1803	0.0474	1.3300e-003	0.0488		171.5602	171.5602	5.0500e-003		171.6864
Total	0.1210	1.4086	0.9823	5.2200e-003	0.2685	4.3200e-003	0.2728	0.0732	4.0700e-003	0.0773		545.8439	545.8439	0.0292		546.5742

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.1838	18.9364	17.6676	0.0462		0.7686	0.7686		0.7071	0.7071	0.0000	4,467.6884	4,467.6884	1.4449		4,503.8120
Total	2.1838	18.9364	17.6676	0.0462	0.0000	0.7686	0.7686	0.0000	0.7071	0.7071	0.0000	4,467.6884	4,467.6884	1.4449		4,503.8120

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.3 SVE Pilot System Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0447	1.3564	0.3931	3.5000e-003	0.0896	2.8700e-003	0.0925	0.0258	2.7400e-003	0.0286		374.2837	374.2837	0.0242		374.8878
Worker	0.0763	0.0522	0.5892	1.7200e-003	0.1788	1.4500e-003	0.1803	0.0474	1.3300e-003	0.0488		171.5602	171.5602	5.0500e-003		171.6864
Total	0.1210	1.4086	0.9823	5.2200e-003	0.2685	4.3200e-003	0.2728	0.0732	4.0700e-003	0.0773		545.8439	545.8439	0.0292		546.5742

3.4 ISGS Barrier Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.1368	9.1415	10.3460	0.0257		0.4220	0.4220		0.3883	0.3883		2,483.3661	2,483.3661	0.8032		2,503.4454
Total	1.1368	9.1415	10.3460	0.0257	0.0000	0.4220	0.4220	0.0000	0.3883	0.3883		2,483.3661	2,483.3661	0.8032		2,503.4454

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.4 ISGS Barrier Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.4000e-004	4.0300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0717	0.0471	0.5427	1.6600e-003	0.1788	1.4000e-003	0.1802	0.0474	1.2900e-003	0.0487		165.5311	165.5311	4.5600e-003		165.6451
Total	0.0776	0.2313	0.5958	2.1600e-003	0.1916	1.7600e-003	0.1934	0.0511	1.6300e-003	0.0528		218.5252	218.5252	7.8900e-003		218.7224

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.1368	9.1415	10.3460	0.0257		0.4220	0.4220		0.3883	0.3883	0.0000	2,483.3661	2,483.3661	0.8032		2,503.4454
Total	1.1368	9.1415	10.3460	0.0257	0.0000	0.4220	0.4220	0.0000	0.3883	0.3883	0.0000	2,483.3661	2,483.3661	0.8032		2,503.4454

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.4 ISGS Barrier Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.4000e-004	4.0300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0717	0.0471	0.5427	1.6600e-003	0.1788	1.4000e-003	0.1802	0.0474	1.2900e-003	0.0487		165.5311	165.5311	4.5600e-003		165.6451
Total	0.0776	0.2313	0.5958	2.1600e-003	0.1916	1.7600e-003	0.1934	0.0511	1.6300e-003	0.0528		218.5252	218.5252	7.8900e-003		218.7224

3.5 Expansion of SVE System - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.9049	14.7436	16.9775	0.0462		0.5928	0.5928		0.5454	0.5454		4,468.4742	4,468.4742	1.4452		4,504.6041
Total	1.9049	14.7436	16.9775	0.0462	0.0000	0.5928	0.5928	0.0000	0.5454	0.5454		4,468.4742	4,468.4742	1.4452		4,504.6041

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.5 Expansion of SVE System - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0419	1.2891	0.3721	3.4700e-003	0.0896	2.5100e-003	0.0921	0.0258	2.4000e-003	0.0282		370.9584	370.9584	0.0233		371.5412
Worker	0.0717	0.0471	0.5427	1.6600e-003	0.1788	1.4000e-003	0.1802	0.0474	1.2900e-003	0.0487		165.5311	165.5311	4.5600e-003		165.6451
Total	0.1136	1.3362	0.9148	5.1300e-003	0.2685	3.9100e-003	0.2724	0.0732	3.6900e-003	0.0769		536.4895	536.4895	0.0279		537.1863

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.9049	14.7436	16.9775	0.0462		0.5928	0.5928		0.5454	0.5454	0.0000	4,468.474 2	4,468.474 2	1.4452		4,504.604 1
Total	1.9049	14.7436	16.9775	0.0462	0.0000	0.5928	0.5928	0.0000	0.5454	0.5454	0.0000	4,468.474 2	4,468.474 2	1.4452		4,504.604 1

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.5 Expansion of SVE System - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0419	1.2891	0.3721	3.4700e-003	0.0896	2.5100e-003	0.0921	0.0258	2.4000e-003	0.0282		370.9584	370.9584	0.0233		371.5412
Worker	0.0717	0.0471	0.5427	1.6600e-003	0.1788	1.4000e-003	0.1802	0.0474	1.2900e-003	0.0487		165.5311	165.5311	4.5600e-003		165.6451
Total	0.1136	1.3362	0.9148	5.1300e-003	0.2685	3.9100e-003	0.2724	0.0732	3.6900e-003	0.0769		536.4895	536.4895	0.0279		537.1863

3.6 Soil Excavations Export Trips - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5400e-003	0.0000	1.5400e-003	2.3000e-004	0.0000	2.3000e-004			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.5400e-003	0.0000	1.5400e-003	2.3000e-004	0.0000	2.3000e-004		0.0000	0.0000	0.0000		0.0000

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.6 Soil Excavations Export Trips - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0831	2.3528	0.6345	8.0700e-003	0.2025	9.2600e-003	0.2117	0.0555	8.8600e-003	0.0644		875.7835	875.7835	0.0533		877.1165
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0831	2.3528	0.6345	8.0700e-003	0.2025	9.2600e-003	0.2117	0.0555	8.8600e-003	0.0644		875.7835	875.7835	0.0533		877.1165

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9000e-004	0.0000	6.9000e-004	1.1000e-004	0.0000	1.1000e-004			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	6.9000e-004	0.0000	6.9000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000		0.0000

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

3.6 Soil Excavations Export Trips - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0831	2.3528	0.6345	8.0700e-003	0.2025	9.2600e-003	0.2117	0.0555	8.8600e-003	0.0644		875.7835	875.7835	0.0533		877.1165
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0831	2.3528	0.6345	8.0700e-003	0.2025	9.2600e-003	0.2117	0.0555	8.8600e-003	0.0644		875.7835	875.7835	0.0533		877.1165

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

7.0 Water Detail

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	24	8760	47	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Winter

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (25 - 50 HP)	1.8509	9.6526	7.4512	8.9000e-003		0.8129	0.8129		0.8129	0.8129		946.9719	946.9719	0.1328		950.2911
Total	1.8509	9.6526	7.4512	8.9000e-003		0.8129	0.8129		0.8129	0.8129		946.9719	946.9719	0.1328		950.2911

11.0 Vegetation

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

Former UCC Torrance Distribution Facility Remediation Project
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	13.80	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	534	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

Project Characteristics - Update CO2 intensity per SCE 2019 Sustainability Report.

Land Use - Based on 13.8 site acreage.

Construction Phase - Based on project specific construction schedule.

Off-road Equipment - Project specific equipment. Off-highway trucks to account for end dump transport truck.

Off-road Equipment - Project specific equipment. Off-highway trucks to account for cement mixing truck, truck mounted drill rig, and hollow-stem auger drill rig CME-85.

Off-road Equipment - Project specific equipment. Other material handling equip to account for mixing trailer. Off-highway truck to account for truck mounted drill rig.

Off-road Equipment - Project specific equipment. Off-highway trucks to account for truck mounted drill rig, hollow-stem CME 85, and cement mixing truck.

Grading - Assumes approximately 150 CY material export and 200 CY material import.

Off-road Equipment - Equipment accounted for other Soil Excavations phase. Placeholder phase to account for export trips.

Trips and VMT - Vendor trucks to account for use of water truck throughout construction and equipment deliveries/removal from site at the beginning/end of each phase. Vendor trips also include well installation and concrete pour trips. Trip length for export haul truck trips based on proposed haul truck route to Buttonwillow to edge of SCAQMD air district boundary.

Vehicle Trips - Assumes one visit, on average, per week.

Energy Use -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps - SVE system equipped with an electric vacuum blower. Electric blower will be powered using a diesel generator (35 KW), 24 hrs/day.

Construction Off-road Equipment Mitigation - Assumes implementation of Rule 403 Fugitive Dust Control.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	11.00
tblConstructionPhase	NumDays	30.00	11.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	PhaseEndDate	7/23/2021	5/17/2021
tblConstructionPhase	PhaseEndDate	6/11/2021	9/1/2021

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

tblConstructionPhase	PhaseStartDate	6/12/2021	5/3/2021
tblConstructionPhase	PhaseStartDate	5/29/2021	7/1/2021
tblGrading	AcresOfGrading	0.00	75.00
tblGrading	MaterialExported	0.00	150.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LotAcreage	0.00	13.80
tblOffRoadEquipment	HorsePower	402.00	164.00
tblOffRoadEquipment	HorsePower	402.00	164.00
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	534

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CO_EF	4.10	4.10
tblStationaryGeneratorsPumpsEF	NOX_EF	5.32	5.32
tblStationaryGeneratorsPumpsEF	PM10_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	47.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	24.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8,760.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	85.00
tblTripsAndVMT	HaulingTripNumber	25.00	40.00
tblTripsAndVMT	HaulingTripNumber	19.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblTripsAndVMT	WorkerTripNumber	10.00	16.00
tblVehicleTrips	WD_TR	0.00	2.00

2.0 Emissions Summary

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-3-2021	8-2-2021	0.5399	0.5399
2	8-3-2021	11-2-2021	0.2425	0.2425
4	2-3-2022	5-2-2022	0.1209	0.1209
5	5-3-2022	8-2-2022	0.3265	0.3265
6	8-3-2022	9-30-2022	0.1938	0.1938
		Highest	0.5399	0.5399

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.3378	1.7616	1.3598	1.6200e-003		0.1484	0.1484		0.1484	0.1484	0.0000	156.7818	156.7818	0.0220	0.0000	157.3314
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3378	1.7616	1.3599	1.6200e-003	0.0000	0.1484	0.1484	0.0000	0.1484	0.1484	0.0000	156.7818	156.7818	0.0220	0.0000	157.3314

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.3378	1.7616	1.3598	1.6200e-003		0.1484	0.1484		0.1484	0.1484	0.0000	156.7818	156.7818	0.0220	0.0000	157.3314
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3378	1.7616	1.3599	1.6200e-003	0.0000	0.1484	0.1484	0.0000	0.1484	0.1484	0.0000	156.7818	156.7818	0.0220	0.0000	157.3314

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Soil Excavations	Grading	5/3/2021	5/17/2021	5	11	
2	SVE Pilot System Construction	Site Preparation	7/1/2021	9/1/2021	5	45	
3	ISGS Barrier Construction	Site Preparation	4/1/2022	6/1/2022	5	44	
4	Expansion of SVE System	Site Preparation	7/1/2022	9/1/2022	5	45	
5	Soil Excavations Export Trips	Grading	5/3/2021	5/17/2021	5	11	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
ISGS Barrier Construction	Rubber Tired Dozers	0	0.00	247	0.40
Expansion of SVE System	Rubber Tired Dozers	0	0.00	247	0.40
ISGS Barrier Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Soil Excavations	Excavators	1	10.00	158	0.38
Expansion of SVE System	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Soil Excavations	Rubber Tired Loaders	1	10.00	203	0.36
Soil Excavations	Off-Highway Trucks	5	10.00	402	0.38
SVE Pilot System Construction	Off-Highway Trucks	1	10.00	402	0.38
SVE Pilot System Construction	Off-Highway Trucks	1	10.00	164	0.38
SVE Pilot System Construction	Excavators	1	10.00	158	0.38
Soil Excavations	Rubber Tired Dozers	0	0.00	247	0.40

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

SVE Pilot System Construction	Off-Highway Trucks	1	10.00	402	0.38
Soil Excavations	Graders	0	0.00	187	0.41
Soil Excavations	Tractors/Loaders/Backhoes	0	0.00	97	0.37
ISGS Barrier Construction	Off-Highway Trucks	1	10.00	402	0.38
SVE Pilot System Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
SVE Pilot System Construction	Rubber Tired Dozers	0	0.00	247	0.40
Soil Excavations	Scrapers	0	0.00	367	0.48
ISGS Barrier Construction	Forklifts	1	10.00	89	0.20
ISGS Barrier Construction	Other Material Handling Equipment	1	10.00	168	0.40
Expansion of SVE System	Off-Highway Trucks	1	10.00	402	0.38
Expansion of SVE System	Off-Highway Trucks	1	10.00	164	0.38
Expansion of SVE System	Excavators	1	10.00	158	0.38
Expansion of SVE System	Off-Highway Trucks	1	10.00	402	0.38
Soil Excavations Export Trips	Excavators	0	0.00	158	0.38
Soil Excavations Export Trips	Graders	0	0.00	187	0.41
Soil Excavations Export Trips	Rubber Tired Dozers	0	0.00	247	0.40
Soil Excavations Export Trips	Scrapers	0	0.00	367	0.48
Soil Excavations Export Trips	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Soil Excavations Export Trips		0	0.00		

Trips and VMT

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
ISGS Barrier Construction	3	16.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SVE Pilot System Construction	4	16.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Excavations	7	16.00	2.00	40.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Expansion of SVE System	4	16.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Excavations Export Trips	0	0.00	0.00	30.00	14.70	6.90	85.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Soil Excavations - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0398	0.0000	0.0398	4.3000e-003	0.0000	4.3000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2223	0.1574	5.3000e-004		8.2400e-003	8.2400e-003		7.5800e-003	7.5800e-003	0.0000	46.7645	46.7645	0.0151	0.0000	47.1426
Total	0.0248	0.2223	0.1574	5.3000e-004	0.0398	8.2400e-003	0.0480	4.3000e-003	7.5800e-003	0.0119	0.0000	46.7645	46.7645	0.0151	0.0000	47.1426

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.2 Soil Excavations - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7000e-004	5.5400e-003	1.2900e-003	2.0000e-005	3.4000e-004	2.0000e-005	3.6000e-004	9.0000e-005	2.0000e-005	1.1000e-004	0.0000	1.5246	1.5246	1.1000e-004	0.0000	1.5272
Vendor	3.0000e-005	1.0900e-003	2.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2712	0.2712	2.0000e-005	0.0000	0.2716
Worker	3.8000e-004	2.9000e-004	3.3300e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8703	0.8703	3.0000e-005	0.0000	0.8709
Total	5.8000e-004	6.9200e-003	4.9100e-003	3.0000e-005	1.3700e-003	3.0000e-005	1.4000e-003	3.7000e-004	3.0000e-005	3.9000e-004	0.0000	2.6660	2.6660	1.6000e-004	0.0000	2.6697

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0179	0.0000	0.0179	1.9300e-003	0.0000	1.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2223	0.1574	5.3000e-004		8.2400e-003	8.2400e-003		7.5800e-003	7.5800e-003	0.0000	46.7644	46.7644	0.0151	0.0000	47.1425
Total	0.0248	0.2223	0.1574	5.3000e-004	0.0179	8.2400e-003	0.0261	1.9300e-003	7.5800e-003	9.5100e-003	0.0000	46.7644	46.7644	0.0151	0.0000	47.1425

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.2 Soil Excavations - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7000e-004	5.5400e-003	1.2900e-003	2.0000e-005	3.4000e-004	2.0000e-005	3.6000e-004	9.0000e-005	2.0000e-005	1.1000e-004	0.0000	1.5246	1.5246	1.1000e-004	0.0000	1.5272
Vendor	3.0000e-005	1.0900e-003	2.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2712	0.2712	2.0000e-005	0.0000	0.2716
Worker	3.8000e-004	2.9000e-004	3.3300e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8703	0.8703	3.0000e-005	0.0000	0.8709
Total	5.8000e-004	6.9200e-003	4.9100e-003	3.0000e-005	1.3700e-003	3.0000e-005	1.4000e-003	3.7000e-004	3.0000e-005	3.9000e-004	0.0000	2.6660	2.6660	1.6000e-004	0.0000	2.6697

3.3 SVE Pilot System Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0491	0.4261	0.3975	1.0400e-003		0.0173	0.0173		0.0159	0.0159	0.0000	91.1929	91.1929	0.0295	0.0000	91.9303
Total	0.0491	0.4261	0.3975	1.0400e-003	0.0000	0.0173	0.0173	0.0000	0.0159	0.0159	0.0000	91.1929	91.1929	0.0295	0.0000	91.9303

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.3 SVE Pilot System Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8000e-004	0.0311	8.4300e-003	8.0000e-005	1.9800e-003	6.0000e-005	2.0500e-003	5.7000e-004	6.0000e-005	6.3000e-004	0.0000	7.7646	7.7646	4.8000e-004	0.0000	7.7766
Worker	1.5500e-003	1.2100e-003	0.0136	4.0000e-005	3.9400e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.5601	3.5601	1.0000e-004	0.0000	3.5627
Total	2.5300e-003	0.0323	0.0220	1.2000e-004	5.9200e-003	9.0000e-005	6.0300e-003	1.6200e-003	9.0000e-005	1.7100e-003	0.0000	11.3247	11.3247	5.8000e-004	0.0000	11.3393

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0491	0.4261	0.3975	1.0400e-003		0.0173	0.0173		0.0159	0.0159	0.0000	91.1928	91.1928	0.0295	0.0000	91.9302
Total	0.0491	0.4261	0.3975	1.0400e-003	0.0000	0.0173	0.0173	0.0000	0.0159	0.0159	0.0000	91.1928	91.1928	0.0295	0.0000	91.9302

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.3 SVE Pilot System Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8000e-004	0.0311	8.4300e-003	8.0000e-005	1.9800e-003	6.0000e-005	2.0500e-003	5.7000e-004	6.0000e-005	6.3000e-004	0.0000	7.7646	7.7646	4.8000e-004	0.0000	7.7766
Worker	1.5500e-003	1.2100e-003	0.0136	4.0000e-005	3.9400e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.5601	3.5601	1.0000e-004	0.0000	3.5627
Total	2.5300e-003	0.0323	0.0220	1.2000e-004	5.9200e-003	9.0000e-005	6.0300e-003	1.6200e-003	9.0000e-005	1.7100e-003	0.0000	11.3247	11.3247	5.8000e-004	0.0000	11.3393

3.4 ISGS Barrier Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0250	0.2011	0.2276	5.6000e-004		9.2800e-003	9.2800e-003		8.5400e-003	8.5400e-003	0.0000	49.5632	49.5632	0.0160	0.0000	49.9639
Total	0.0250	0.2011	0.2276	5.6000e-004	0.0000	9.2800e-003	9.2800e-003	0.0000	8.5400e-003	8.5400e-003	0.0000	49.5632	49.5632	0.0160	0.0000	49.9639

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.4 ISGS Barrier Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.1300e-003	1.1100e-003	1.0000e-005	2.8000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0751	1.0751	6.0000e-005	0.0000	1.0767
Worker	1.4200e-003	1.0700e-003	0.0123	4.0000e-005	3.8600e-003	3.0000e-005	3.8900e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.3586	3.3586	9.0000e-005	0.0000	3.3609
Total	1.5500e-003	5.2000e-003	0.0134	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	4.0000e-005	1.1400e-003	0.0000	4.4337	4.4337	1.5000e-004	0.0000	4.4376

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0250	0.2011	0.2276	5.6000e-004		9.2800e-003	9.2800e-003		8.5400e-003	8.5400e-003	0.0000	49.5631	49.5631	0.0160	0.0000	49.9639
Total	0.0250	0.2011	0.2276	5.6000e-004	0.0000	9.2800e-003	9.2800e-003	0.0000	8.5400e-003	8.5400e-003	0.0000	49.5631	49.5631	0.0160	0.0000	49.9639

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.4 ISGS Barrier Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.1300e-003	1.1100e-003	1.0000e-005	2.8000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0751	1.0751	6.0000e-005	0.0000	1.0767
Worker	1.4200e-003	1.0700e-003	0.0123	4.0000e-005	3.8600e-003	3.0000e-005	3.8900e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.3586	3.3586	9.0000e-005	0.0000	3.3609
Total	1.5500e-003	5.2000e-003	0.0134	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	4.0000e-005	1.1400e-003	0.0000	4.4337	4.4337	1.5000e-004	0.0000	4.4376

3.5 Expansion of SVE System - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0429	0.3317	0.3820	1.0400e-003		0.0133	0.0133		0.0123	0.0123	0.0000	91.2090	91.2090	0.0295	0.0000	91.9464
Total	0.0429	0.3317	0.3820	1.0400e-003	0.0000	0.0133	0.0133	0.0000	0.0123	0.0123	0.0000	91.2090	91.2090	0.0295	0.0000	91.9464

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.5 Expansion of SVE System - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0295	7.9700e-003	8.0000e-005	1.9800e-003	6.0000e-005	2.0400e-003	5.7000e-004	5.0000e-005	6.3000e-004	0.0000	7.6964	7.6964	4.6000e-004	0.0000	7.7079
Worker	1.4500e-003	1.0900e-003	0.0125	4.0000e-005	3.9400e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.4350	3.4350	9.0000e-005	0.0000	3.4373
Total	2.3700e-003	0.0306	0.0205	1.2000e-004	5.9200e-003	9.0000e-005	6.0200e-003	1.6200e-003	8.0000e-005	1.7100e-003	0.0000	11.1314	11.1314	5.5000e-004	0.0000	11.1453

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0429	0.3317	0.3820	1.0400e-003		0.0133	0.0133		0.0123	0.0123	0.0000	91.2089	91.2089	0.0295	0.0000	91.9463
Total	0.0429	0.3317	0.3820	1.0400e-003	0.0000	0.0133	0.0133	0.0000	0.0123	0.0123	0.0000	91.2089	91.2089	0.0295	0.0000	91.9463

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

3.6 Soil Excavations Export Trips - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6000e-004	0.0132	3.4600e-003	4.0000e-005	1.0900e-003	5.0000e-005	1.1500e-003	3.0000e-004	5.0000e-005	3.5000e-004	0.0000	4.3813	4.3813	2.6000e-004	0.0000	4.3879
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.6000e-004	0.0132	3.4600e-003	4.0000e-005	1.0900e-003	5.0000e-005	1.1500e-003	3.0000e-004	5.0000e-005	3.5000e-004	0.0000	4.3813	4.3813	2.6000e-004	0.0000	4.3879

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Former UCC Torrance Distribution Facility Remediation Project - Los Angeles-South Coast County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	24	8760	47	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (25 - 50 HP)	0.3378	1.7616	1.3598	1.6200e-003		0.1484	0.1484		0.1484	0.1484	0.0000	156.7818	156.7818	0.0220	0.0000	157.3314
Total	0.3378	1.7616	1.3598	1.6200e-003		0.1484	0.1484		0.1484	0.1484	0.0000	156.7818	156.7818	0.0220	0.0000	157.3314

11.0 Vegetation

APPENDIX B

Biological Resources Database Output

Table 1. Potential for Special Status Species—Plants

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Aphanisma blitoides</i>	aphanisma	-	-	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. Blooms February to June at elevations from 0-1,000 feet.	No potential to occur; no suitable habitat (dunes) is present in the BSA.
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch	-	-	1B.1	Found in Lake margins, alkaline sites. Meadows and seeps, playas throughout California and Nevada. Blooms from May to October at elevations from 196-2,788 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura Marsh milk-vetch	FE	SE	1B.1	Marshes and swamps, coastal dunes, coastal scrub. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. Blooms from April to May at elevations ranging from 3-196 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Astragalus tener</i> var. <i>titi</i>	coastal dunes milk-vetch	FE	SE	1B.1	Coastal bluff scrub, coastal dunes, coastal prairie. Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. Blooms from March to May at elevations ranging from 0-165 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Atriplex coulteri</i>	Coulter's saltbush	-	-	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley, and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. Blooms from March to October at elevations ranging from 5-1,550 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Atriplex pacifica</i>	south coast saltscale	-	-	1B.2	Coastal scrub, coastal bluff scrub, playas, and coastal dunes. Blooms from March to October at elevations ranging from 0-460 feet.	No potential to occur; no suitable habitat is present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Atriplex parishii</i>	Parish's brittle scale	-	-	1B.1	Chenopod scrub, Playas, Vernal pools. Alkaline. Blooms from June to October at elevations ranging from 80-6,235 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Atriplex serenana</i> var. <i>dauidsonii</i>	Davidson's salt scale	-	-	1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil. Blooms from April to October at elevations ranging from 30-655 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	-	-	1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also, in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. Blooms from May to November at elevations ranging from 0-1,575 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	-	-	1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub and disturbed places. Blooms from April to September at elevations ranging from 0-2,100 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	-	-	1B.1	Coastal bluff scrub, coastal dunes. Sandy sites. Blooms from January to August at elevations ranging from 0-330 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Chenopodium littoreum</i>	coastal goosefoot	-	-	1B.2	Coastal dunes. Generally, on sandy soils, and on dunes. Blooms from April to August at elevations ranging from 30-100 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	FE	SE	1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. Blooms from May to October at elevations ranging from 0-100 feet.	No potential to occur; no suitable habitat is present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	-	SE	1B.1	Coastal scrub, valley, and foothill grassland. Blooms from April to July at elevations ranging from 490-4,005 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Crossosoma californicum</i>	Catalina crossosoma	-	-	1B.2	Chaparral, coastal scrub. On rocky sea bluffs, wooded canyons, and dry, open sunny spots on rocky clay. Blooms from February to May at elevations ranging from 0-1,640 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Dithyrea maritima</i>	beach spectaclepod	-	ST	1B.1	Coastal dunes, coastal scrub. Sea shores, on sand dunes, and sandy places near the shore. Blooms from March to May at elevations ranging from 5-165 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Dudleya multicaulis</i>	many-stemmed dudleya	-	-	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland. Often in clay soils. Blooms form April to July at elevations ranging from 45-2,590.	No potential to occur; no suitable habitat is present in the BSA.
<i>Dudleya virens</i> ssp. <i>insularis</i>	island green dudleya	-	-	1B.2	Coastal bluff scrub, coastal scrub. Rocky soils. Blooms form April to July at elevations ranging from 15-985.	No potential to occur; no suitable habitat is present in the BSA.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE	SE	1B.1	Vernal pools, coastal scrub, valley and foothill grassland. San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usually surrounded by scrub. Blooms form April to June at elevations ranging from 65-2,035.	No potential to occur; no suitable habitat is present in the BSA.
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	-	-	1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Blooms form February to July at elevations ranging from 225-2,655.	No potential to occur; no suitable habitat is present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	-	-	1B.2	Coastal scrub, chaparral. Sandy soils; often in disturbed sites. Blooms form April to November at elevations ranging from 30-445 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	-	-	1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. Blooms form February to June at elevations ranging from 0-4,005 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Navarretia fossalis</i>	spreading navarretia	FT	-	1B.1	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales & vernal pools, often surrounded by other habitat types. Blooms form April to June at elevations ranging from 95-2,150 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	-	-	1B.2	Coastal scrub, valley and foothill grassland, vernal pools, meadows, and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. Blooms form April to July at elevations ranging from 5-3,970 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	-	-	1B.2	Coastal dunes. Blooms from April to September. Found in elevation from 100-330 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Orcuttia californica</i>	California Orcutt grass	FE	SE	1B.1	Vernal pools. Blooms form April to August at elevations ranging from 45-2,165 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	FE	SE	1B.1	Chaparral, valley and foothill grassland, coastal scrub. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or	No potential to occur; no suitable habitat is present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
					edges of firebreaks. Blooms form March to August at elevations ranging from 95-2,265 feet.	
<i>Phacelia stellaris</i>	Brand's star phacelia	-	-	1B.1	Coastal scrub, coastal dunes. Open areas. Blooms form March to June at elevations ranging from 0-1,310 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Potentilla multijuga</i>	Ballona cinquefoil	-	-	1A	Meadows and seeps (brackish). Blooms from June to August. Found in elevation from 2-5 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Suaeda esteroa</i>	estuary seablite	-	-	1B.2	Marshes and swamps. Coastal salt marshes in clay, silt, and sand substrates. Blooms form May to October at elevations ranging from 0-15 feet.	No potential to occur; no suitable habitat is present in the BSA.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	-	-	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. Blooms form July to November at elevations ranging from 5-6,695 feet.	No potential to occur; no suitable habitat is present in the BSA.

Table 2. Potential for Special Status Species–Invertebrates

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Bombus crotchii</i>	Crotch bumble bee	-	SC	-	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum. Coastal California east to the Sierra-Cascade crest and south into Mexico.	No potential to occur; there is a CNDDDB occurrence within a mile of the BSA, however there is no suitable native habitat in or near the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Euphilotes battoides allyni</i>	El Segundo blue butterfly	FE	-	-	Restricted to remnant coastal dune habitat in Southern California. Host plant is <i>Eriogonum parvifolium</i> ; larvae feed only on the flowers and seeds; used by adults as major nectar source.	No potential to occur; there is no suitable dune habitat in or near the BSA.
<i>Glaucopsyche lygdamus palosverdesensis</i>	Palos Verdes blue butterfly	FE	-	-	Restricted to the cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County. Host plant is <i>Astragalus trichopodus</i> var. <i>lonchus</i> (locoweed).	No potential to occur; a CNDDB record of the species occurs within the BSA. However, the occurrence information (GPS) is suppressed but states the species was observed on coastal sage scrub habitat which is not present in the project area. There is a large parcel of undeveloped land (965 feet away) to the southeast of the project area that from aerial imagery indicates coastal sage scrub could be found here, however it is located outside the 500-foot buffer of the BSA.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	-	-	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	No potential to occur; there is no suitable vernal habitat in or near the BSA.

Table 3. Potential for Special Status Species–Fish

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Siphateles bicolor mohavensis</i>	Mohave tui chub	FE	SE	FP	Endemic to the Mojave River basin, adapted to alkaline, mineralized waters. Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	No potential to occur; the study area is outside the species' known range and there is no suitable aquatic habitat (reservoirs or small lakes) present in the BSA.

Table 4. Potential for Special Status Species–Amphibians and Reptiles

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Anniella stebbinsi</i>	Southern California legless lizard	-	-	SSC	Generally, south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally, in moist, loose soil. They prefer soils with a high moisture content.	No potential to occur; the study area is composed of developed industrial land or disturbed gravel lots. There is a CNDDDB occurrence within half a mile of the BSA, however the species is known to occur in loose loamy soils under sparse vegetation and the site is devoid of suitable habitat.
<i>Emys marmorata</i>	western pond turtle	-	-	SSC	Closely associated with permanent or nearly permanent water in a variety of aquatic habitats. For foraging, ponds, marshes, slow-moving streams, sloughs, and irrigation/drainage ditches; for nesting, soils in nearby uplands with low, sparse vegetation. Basking sites are required for thermoregulation, such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Hibernation may occur in aquatic habitats or in burrows of adjacent uplands, often with duff. Throughout California west of	No potential to occur; the study area is composed of developed industrial land or disturbed gravel lots. There is a small pond, known as the decommissioned Heil Separator, on the northeast side of the study area, however no suitable habitat for western pond turtle is present here.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
					the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Elevation range extends from near sea level to 4,690 ft.	
<i>Phrynosoma blainvillii</i>	coast horned lizard	-	-	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No potential to occur; a 1989 CNDDDB record of the species occurs within one mile of the BSA in El Nido Park however no suitable habitat for the species occurs within the BSA.
<i>Spea hammondi</i>	western spadefoot toad	-	-	SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying. Found throughout the Central Valley, adjacent foothills, and in the Coast Ranges.	No potential to occur; no suitable aquatic breeding habitat (vernal pools) present in the BSA.

Table 5. Potential for Special Status Species–Birds

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Agelaius tricolor</i>	tricolored blackbird	-	ST	SSC	Individuals forage in agricultural lands and grasslands, and nest in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs. Breeding range includes the Central Valley and other lowland areas of California west of the Cascade–Sierra Nevada axis.	No potential to occur; there is no suitable nesting habitat (e.g., emergent marsh, riparian, or blackberry/thistle thickets) present in or within 500 feet of the BSA. The two nearby records of the species are historic records dating back to 1940 and the 1980s.
<i>Athene cunicularia</i>	burrowing owl	-	-	SSC	For nesting and foraging requires grasslands, agricultural fields, and low	No potential to occur; no suitable habitat is present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
					scrub habitats, especially where ground squirrel burrows are present; occasionally inhabit artificial structures and small patches of disturbed habitat. Broadly distributed in western North America; year-round resident throughout much of California.	
<i>Charadrius nivosus nivosus</i>	western snowy plover	FT	-	SSC	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	No potential to occur; no suitable sandy beach or shore habitat is present in the BSA.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT	SE	-	Nests in large blocks of deciduous riparian thickets or forests with dense, low-level or understory foliage adjacent to slow-moving watercourses, backwaters along broad, lower floodplains of larger river systems. Willow and cottonwood are almost always a component of the vegetation. In the Sacramento Valley, also utilizes adjacent walnut orchards. In California, the western yellow-billed cuckoo's breeding distribution is restricted to isolated sites in the Sacramento, Amargosa, Kern, Santa Ana, and Colorado River Valleys.	No potential to occur; there is no suitable riparian habitat in or near the BSA.
<i>Coturnicops noveboracensis</i>	yellow rail	-	-	SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.	No potential to occur; no suitable habitat is present in the BSA.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	-	ST	FP	Freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense	No potential to occur; no suitable habitat (marsh) present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
					vegetation for nesting habitat. Range includes the San Francisco Bay area, Sacramento-San Joaquin Delta, coastal southern California at Morro Bay and a few other locations, the Salton Sea, and lower Colorado River area.	
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	-	SE		Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in Salicornia on and about margins of tidal flats.	No potential to occur; no suitable habitat is present in the BSA.
<i>Pelecanus occidentalis californicus</i>	California brown pelican	DL	DL	FP	Colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators. Roosts communally.	No potential to occur; no suitable habitat is present in the BSA.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT	-	SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	No potential to occur; no suitable habitat is present in the BSA. The species occurs in coastal sage scrub habitat along the Palos Verdes Peninsula.
<i>Riparia riparia</i> (nesting)	bank swallow	-	ST	-	Nests in colonies in unvegetated vertical banks or cliffs with fine-textured, sandy soils, typically next to streams, rivers, or lakes, but also can be found in gravel pits and highway cuts.	No potential to occur; no suitable ocean bluff/banks or cliff habitat is present in the BSA.
<i>Sternula antillarum browni</i>	California least tern	FE	SE	FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	No potential to occur; no suitable habitat is present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	FE	SE	-	Riparian habitat along rivers and streams; generally early-mid successional riparian scrub/forest that is structurally diverse. In willows and other low, dense valley foothill riparian habitat and lower portions of canyons. Rare, local, summer resident in California below about 2,000 ft.	No potential to occur; no suitable habitat (riparian) present in the BSA.

Table 6. Potential for Special Status Species–Mammals

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Eumops perotis californicus</i>	western mastiff bat	-	-	SSC, WBWG-H	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	No potential to occur; no suitable habitat is present in the BSA.
<i>Lasionycteris noctivagans</i>	silver-haired bat	-	-	WBWG-M	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	No potential to occur; no suitable habitat is present in the BSA.
<i>Microtus californicus stephensi</i>	south coast marsh vole	-	-	SSC	Found in tidal marshes in Los Angeles, Orange and southern Ventura counties.	No potential to occur; no suitable habitat is present in the BSA.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	-	-	SSC	Found in coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	No potential to occur; no suitable habitat is present in the BSA.

Species Scientific Name	Species Common Name	Status ¹ Federal	Status ¹ State	Status ¹ CDFW ³ or CRPR ⁴	Habitat & Distribution	Potential for Occurrence ²
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	-	-	SSC, WBWG-M	Found in variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	No potential to occur; no suitable habitat is present in the BSA.
<i>Nyctinomops macrotis</i>	big free-tailed bat	-	-	SSC, WBWG-M	Found in low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	No potential to occur; no suitable habitat is present in the BSA.
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE	-	SSC	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County. Seems to prefer soils of fine alluvial sands near the ocean, but much remains to be learned.	No potential to occur; no suitable habitat is present in the BSA.
<i>Sorex ornatus salicornicus</i>	southern California saltmarsh shrew	-	-	SSC	Found in coastal marshes in Los Angeles, Orange and Ventura counties. Requires dense vegetation and woody debris for cover.	No potential to occur; no suitable habitat is present in the BSA.
<i>Taxidea taxus</i>	American badger	-	-	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs enough food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows. Uncommon, permanent resident found throughout most of the state.	No potential to occur; no suitable habitat is present in the BSA.

Notes:

Quad Search: Torrance, Venice, Inglewood, S Gate, Long Beach, Long Beach OE S, San Pedro, Redondo Bch OES, Redondo Beach (USGS 2018a-i).

¹Listing Status (CDFW 2021b):

Federal Endangered Species Act:

FE = endangered

FT = threatened

FC = candidate

FD = delisted

– = no status

State Endangered Species Act:

SE = endangered

SCE = candidate endangered

ST = threatened

SCT = candidate threatened

SD = delisted

SR = rare

– = no status

²California Department of Fish and Wildlife (CDFW):

SSC = species of special concern

FP = fully protected

WL = watch listed

– = no status

³California Rare Plant Rank (CRPR) (CNPS 2021b):

1A: Plants presumed extirpated in California and either rare or extinct elsewhere.

1B: Plants rare, threatened, or endangered in California and elsewhere

2A: Plants presumed extirpated in California but common elsewhere.

2B: Plants rare, threatened, or endangered in California but more common elsewhere

In addition, ranks at each level also include a threat rank and are determined as follows:

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

⁴Potential for Occurrence:

No Potential to Occur: The study area is outside the species' range or suitable habitat for the species is absent from the study area and adjacent areas.

Not Likely to Occur: Habitat for the species is marginal, and no occurrences of the species have been recorded within three miles of the study area.

Could Occur: The study area is within the species' range, suitable habitat for the species is present, and recorded occurrences of the species are generally present in the vicinity.

Known to Occur: The study area is within the species' range, suitable habitat for the species is present, and the species has been recorded from within the project site.

⁵Western Bat Working Group (WBWG): The WBWG is composed of agencies, organizations, and individuals interested in bat research, management, and conservation from 13 western states and provinces. Species are ranked as High, Medium, or Low Priority in each of 10 regions in western North America. The CNDDDB tracks bat species that are at least Low-Medium Priority in California (CDFW 2021b).

Sources: CNPS 2021a and 2021b; CDFW 2021a and 2021b; and USFWS 2021a. Compiled by AECOM in March of 2021.



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Torrance (3311873) OR Venice (3311884) OR Inglewood (3311883) OR South Gate (3311882) OR Long Beach (3311872) OR San Pedro (3311863) OR Redondo Beach (3311874))

Spea hammondii		Element Code: AAABF02020	
western spadefoot			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2G3
	State: None		State: S3
Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened		
Habitat:	General: OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.		
	Micro: VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.		

Occurrence No.	1046	Map Index: B3948	EO Index: 116862	Element Last Seen: 1966-04-25
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1966-04-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2019-09-16

Quad Summary: Torrance (3311873), Redondo Beach (3311874)
County Summary: Los Angeles

Lat/Long:	33.84837 / -118.37753	Accuracy:	1/5 mile
UTM:	Zone-11 N3746197 E372558	Elevation (ft):	145
PLSS:	T04S, R14W, Sec. 8, NW (S)	Acres:	70.0

Location: N PROSPECT AVE AT DEL ALMO BLVD INTERSECTION, REDONDO BEACH.
Detailed Location: GIVEN LOCATION: REDONDO BEACH (PROSPECT AND P.E. ROAD BED). P. E. MOST LIKELY ABBREVIATION FOR PACIFIC ELECTRIC RAILWAY WHICH INTERSECTED PROSPECT AVE AT PRESENT DAY DEL AMO BLVD; REFERENCE 1924 TORRANCE USGS TOPO.
Ecological: AREA HAS BEEN COMPLETELY URBANIZED FROM TIME OF COLLECTION, LIKELY EXTIRPATED.
General: 1 COLLECTED ON 25 APR 1966.
Owner/Manager: UNKNOWN

Occurrence No.	1047	Map Index: B3949	EO Index: 116863	Element Last Seen: 1958-04-15
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1958-04-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2019-09-16

Quad Summary: Inglewood (3311883)
County Summary: Los Angeles

Lat/Long:	33.91872 / -118.35075	Accuracy:	1 mile
UTM:	Zone-11 N3753965 E375138	Elevation (ft):	72
PLSS:	T03S, R14W, Sec. 9 (S)	Acres:	1987.0

Location: VICINITY OF HAWTHORNE
Detailed Location: GIVEN LOCALITY: "HAWTHORN," MAPPED TO THE VICINITY OF HAWTHORNE; EXACT LOCATION UNKNOWN.
Ecological: THIS AREA HAS BEEN RELATIVELY WELL DEVELOPED SINCE THE LATE 1940S. IT IS UNCLEAR WHERE THIS MAY HAVE BEEN COLLECTED. AREA IS NOW COMPLETELY URBANIZED; LIKELY EXTIRPATED.
General: 6 SPECIMENS COLLECTED ON 15 APR 1958.
Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1048	Map Index: B3951	EO Index: 116865	Element Last Seen:	1938-02-03
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1938-02-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-09-16
Quad Summary:	Inglewood (3311883)				
County Summary:	Los Angeles				
Lat/Long:	33.94543 / -118.30907		Accuracy:	1/5 mile	
UTM:	Zone-11 N3756877 E379029		Elevation (ft):	239	
PLSS:	T03S, R14W, Sec. 2, NE (S)		Acres:	70.0	
Location:	CENTURY BLVD AND WESTERN AVE INTERSECTION, WESTMONT, SOUTH LOS ANGELES.				
Detailed Location:					
Ecological:	AREA HAS BEEN COMPLETELY URBANIZED SINCE TIME OF COLLECTION (SEE 1938 AERIAL); SPECIES LIKELY EXTIRPATED FROM THE VICINITY.				
General:	1 COLLECTED ON 3 FEB 1938.				
Owner/Manager:	UNKNOWN				
Occurrence No.	1049	Map Index: B3953	EO Index: 116866	Element Last Seen:	1956-05-02
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1956-05-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-09-16
Quad Summary:	Los Alamitos (3311871), Whittier (3311881), South Gate (3311882)				
County Summary:	Los Angeles				
Lat/Long:	33.88792 / -118.11662		Accuracy:	1 mile	
UTM:	Zone-11 N3750290 E396745		Elevation (ft):	76	
PLSS:	T03S, R12W, Sec. 27 (S)		Acres:	1987.0	
Location:	VICINITY OF BELLFLOWER				
Detailed Location:					
Ecological:	AREA HEAVILY DEVELOPED, SPECIES LIKELY EXTIRPATED FROM VICINITY.				
General:	1 COLLECTED ON 2 MAY 1956.				
Owner/Manager:	UNKNOWN				
Occurrence No.	1082	Map Index: B4015	EO Index: 116931	Element Last Seen:	19XX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	19XX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-10-22
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.82188 / -118.29037		Accuracy:	2/5 mile	
UTM:	Zone-11 N3743156 E380585		Elevation (ft):	42	
PLSS:	T04S, R13W, Sec. 18, SW (S)		Acres:	280.0	
Location:	VERMONT AVE, SOUTH OF ITS INTERSECTION WITH W 223RD ST AND NORTH OF W 228TH ST, TORRANCE.				
Detailed Location:	GIVEN LOCATION: "GARDENA, 226TH ST AND VERMONT AVE." THESE ROAD DO NOT CURRENTLY INTERSECT. MAPPED ALONG VERMONT AVE BETWEEN 223RD ST AND 228TH ST, LOCATED ABOUT 2 MILES SOUTH OF THE GARDENIA CITY LIMIT.				
Ecological:	AREA HAS BEEN HEAVILY DEVELOPED SINCE TIME OF COLLECTION AND IS PRESUMED EXTIRPATED.				
General:	1 COLLECTED ON UNKNOWN DATE, MOST LIKELY SOME TIME BETWEEN 1950S AND 1970S.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1083	Map Index: B4016	EO Index: 116932	Element Last Seen:	1959-03-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1959-03-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-10-22

Quad Summary: San Pedro (3311863), Torrance (3311873), Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.75948 / -118.36297	Accuracy:	1 mile
UTM:	Zone-11 N3736322 E373775	Elevation (ft):	1190
PLSS:	T05S, R14W, Sec. 9 (S)	Acres:	1987.0

Location: VICINITY OF PALOS VERDES HILLS.

Detailed Location: GIVEN LOCATION, "PALOS VERDES HILLS," EXACT LOCATION UNKNOWN.

Ecological:

General: 1 COLLECTED IN MAR 1959.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Pelecanus occidentalis californicus</i>		Element Code: ABNFC01021	
California brown pelican			
Listing Status:	Federal: Delisted	CNDDDB Element Ranks:	Global: G4T3T4
	State: Delisted		State: S3
Habitat:	Other: BLM_S-Sensitive, CDFW_FP-Fully Protected, USFS_S-Sensitive		
	General: COLONIAL NESTER ON COASTAL ISLANDS JUST OUTSIDE THE SURF LINE.		
	Micro: NESTS ON COASTAL ISLANDS OF SMALL TO MODERATE SIZE WHICH AFFORD IMMUNITY FROM ATTACK BY GROUND-DWELLING PREDATORS. ROOSTS COMMUNALLY.		

Occurrence No.	14	Map Index: 63544	EO Index: 63649	Element Last Seen: 2000-XX-XX
Occ. Rank:	Excellent	Presence: Presumed Extant	Site Last Seen: 2000-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Record Last Updated: 2005-12-29	

Quad Summary: Long Beach (3311872)
County Summary: Los Angeles

Lat/Long:	33.72344 / -118.19059	Accuracy:	specific area
UTM:	Zone-11 N3732128 E389693	Elevation (ft):	0
PLSS:	T99X, R99X, Sec. UN (X)	Acres:	397.7

Location: EASTERN AND MIDDLE LONG BEACH HARBOR BREAKWATERS.
Detailed Location: ROOST NUMBER LA 1.0 (EAST BREAKWATER) AND LA 2.0 (MIDDLE BREAKWATER).
Ecological: COMBINED BREAKWATERS ARE 9.4 KM IN LENGTH. THEY ARE BROAD & SOMEWHAT PROTECTED FROM WINTER SURF.
General: DAY & NIGHT ROOST. THIS IS LARGEST & HIGHEST QUALITY ROOST ON SOUTHERN CALIFORNIA COAST. 584 BIRDS COUNTED AT DAWN 5 NOV 1986. SUMMARY OF 1986-87, 1992-93 & 1998-2000 DIURNAL COUNTS: 31-650 BIRDS (MIDDLE) & 53-690 BIRDS (EAST) BREAKWATERS.
Owner/Manager: LONG BEACH HARBOR, DOD-COE

Occurrence No.	16	Map Index: 63568	EO Index: 63663	Element Last Seen: 2000-07-09
Occ. Rank:	Excellent	Presence: Presumed Extant	Site Last Seen: 2000-07-09	
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Record Last Updated: 2006-01-04	

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.96092 / -118.46304	Accuracy:	specific area
UTM:	Zone-11 N3758787 E364823	Elevation (ft):	0
PLSS:	T99X, R99X, Sec. UN (X)	Acres:	32.2

Location: MARINA DEL REY BREAKWATER.
Detailed Location: ROOST NUMBER LA 12.0.
Ecological: BREAKWATER IS 0.8 KM LONG.
General: MAJOR DAY & NIGHT ROOST. THIS IS 2ND LARGEST ROOST ON SOUTHERN CALIFORNIA COAST. SUMMARY OF 1986-87, 1992-93 & 1998-2000 DIURNAL COUNTS: RANGE 31-640 BIRDS, MEAN 323.1 BIRDS. 601-1,642 BIRDS IN NIGHT COUNTS BETWEEN 1991 & 2000.
Owner/Manager: MARINA DEL REY, DOD-COE



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Coturnicops noveboracensis

Element Code: ABNME01010

yellow rail

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4
	State: None		State: S1S2
Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: SUMMER RESIDENT IN EASTERN SIERRA NEVADA IN MONO COUNTY.		
	Micro: FRESHWATER MARSHLANDS.		

Occurrence No.	23	Map Index: A5268	EO Index: 106991	Element Last Seen: 1998-10-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1998-10-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2017-07-12

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.8924 / -118.4154	Accuracy:	1 mile
UTM:	Zone-11 N3751127 E369121	Elevation (ft):	53
PLSS:	T03S, R15W, Sec. 24 (S)	Acres:	1987.0

Location: THE STRAND, MANHATTAN BEACH.

Detailed Location: MAPPED GENERALLY, BASED ON SPECIMEN LOCALITY. EXACT COLLECTION LOCATION UNKNOWN.

Ecological:

General: INJURED BIRD FOUND ON 20 OCT 1998; DIED IN REHAB.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Laterallus jamaicensis coturniculus</i>		Element Code: ABNME03041	
California black rail			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3G4T1
	State: Threatened		State: S1
Other:	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_NT-Near Threatened, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: INHABITS FRESHWATER MARSHES, WET MEADOWS AND SHALLOW MARGINS OF SALTWATER MARSHES BORDERING LARGER BAYS.		
	Micro: NEEDS WATER DEPTHS OF ABOUT 1 INCH THAT DO NOT FLUCTUATE DURING THE YEAR AND DENSE VEGETATION FOR NESTING HABITAT.		

Occurrence No.	68	Map Index:	23785	EO Index:	17538	Element Last Seen:	1928-02-25
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1928-02-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2017-07-26	

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.97291 / -118.44837	Accuracy:	1 mile
UTM:	Zone-11 N3760097 E366198	Elevation (ft):	5
PLSS:	T02S, R15W, Sec. 28 (S)	Acres:	0.0

Location: VICINITY OF MARINA DEL REY, NEAR MOUTH OF BALLONA CREEK, PLAYA DEL REY, S OF VENICE.
Detailed Location: 1895 LOCATION STATED AS "BALLONA MARSH" AND 1928 LOCATION STATED AS "PLAYA DEL REY MARSH." MAPPED WITH RESPECT TO HISTORIC 1896-1934 USGS MAPS SHOWING BALLONA LAGOON AND PLAYA DEL REY (=PORT BALLONA).
Ecological: EXTENSIVE MARSH/WETLANDS (ABOUT 1,600 ACRES) DEPICTED IN HISTORIC USGS MAPS (REDONDO - 1896, 1:62500 AND VENICE - 1924, 1:2400). AREA HAS BEEN MOSTLY DEVELOPED; GENERAL AREA OF CURRENT MARINA DEL REY.
General: ONE RAIL OBSERVED ON 12 DEC 1895. ONE RAIL FOUND DEAD (IMPALED ON A BARBED WIRE FENCE, LIKELY EITHER KILLED BY A SHRIKE OR STRUCK THE FENCE IN FLIGHT) ON 25 FEB 1928. 1 EGG FOUND AT AN UNKNOWN DATE PRIOR TO 1974.
Owner/Manager: DPR-DOCKWEILER SB



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Charadrius nivosus nivosus</i>		Element Code: ABNNB03031	
western snowy plover			
Listing Status:	Federal: Threatened	CNDDB Element Ranks:	Global: G3T3
	State: None		State: S2
	Other: CDFW_SSC-Species of Special Concern, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: SANDY BEACHES, SALT POND LEVEES & SHORES OF LARGE ALKALI LAKES.		
	Micro: NEEDS SANDY, GRAVELLY OR FRIABLE SOILS FOR NESTING.		

Occurrence No.	36	Map Index:	01488	EO Index:	7920	Element Last Seen:	1914-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:	1914-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2007-12-07		
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles, Pacific Ocean						
Lat/Long:	33.95266 / -118.44858		Accuracy:	non-specific area			
UTM:	Zone-11 N3757852 E366147		Elevation (ft):	10			
PLSS:	T02S, R15W, Sec. 33 (S)		Acres:	154.1			
Location:	PLAYA DEL REY.						
Detailed Location:							
Ecological:							
General:	ONE EGG SET COLLECTED IN 1914 BY U.S. NATIONAL MUSEUM.						
Owner/Manager:	DPR-DOCKWEILER SB						

Occurrence No.	37	Map Index:	36797	EO Index:	21223	Element Last Seen:	1904-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:	1904-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2007-12-07		
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles, Pacific Ocean						
Lat/Long:	33.96645 / -118.45814		Accuracy:	non-specific area			
UTM:	Zone-11 N3759393 E365285		Elevation (ft):	10			
PLSS:	T02S, R15W, Sec. 28 (S)		Acres:	31.6			
Location:	BALLONA BEACH (DOCKWEILER STATE BEACH).						
Detailed Location:	MAPPED AT THE BEACH NORTH OF BALLONA CREEK.						
Ecological:							
General:	FORTY-SIX EGG SETS COLLECTED BY THE NATIONAL MUSEUM OF NATURAL HISTORY BETWEEN 1894-1904.						
Owner/Manager:	DPR-DOCKWEILER SB						

<i>Sternula antillarum browni</i>		Element Code: ABNNM08103	
California least tern			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G4T2T3Q
	State: Endangered		State: S2
	Other: CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List		
Habitat:	General: NESTS ALONG THE COAST FROM SAN FRANCISCO BAY SOUTH TO NORTHERN BAJA CALIFORNIA.		
	Micro: COLONIAL BREEDER ON BARE OR SPARSELY VEGETATED, FLAT SUBSTRATES: SAND BEACHES, ALKALI FLATS, LAND FILLS, OR PAVED AREAS.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	12	Map Index: 01439	EO Index: 25699	Element Last Seen:	1996-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1996-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Stable	Record Last Updated:	1998-10-21

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.96777 / -118.45888	Accuracy:	non-specific area
UTM:	Zone-11 N3759541 E365219	Elevation (ft):	10
PLSS:	T02S, R15W, Sec. 28 (S)	Acres:	4.6

Location: VENICE BEACH SITE. SOUTHERN END OF VENICE BEACH, NORTH OF BALLONA CREEK, PART OF DOCKWEILER STATE BEACH.

Detailed Location: HISTORICALLY, BIRDS NESTED ALONG THIS ENTIRE BEACH STRAND. RECORDS FROM "DEL REY", "MARINA DEL REY" AND "DEL REY LAGOON". BIRDS ALSO NESTED ON FILL SITE FOR HARBOR. UCLA #32595. NESTING RECORDS FROM VENICE BEACH GO BACK TO 1898.

Ecological: PRIOR TO THE 1988 SEASON, NEST SITE WAS ENLARGED, AND A NEW FENCE ELIMINATED MUCH OF THE PREDATION AND DISTURBANCE.

General: 1973-84: MEAN OF 106 PR/YR, GOOD FLEDGING; 1985: 107 NESTS, 113 FLEDGED; 1987: 109 PR, 82 FLEDGED. 1988: 165 PR, 192 FLEDGED. 1990: 206 PR, 279 FLEDGED. 1991: 198 PR, 200 FLEDGED, 1992: 229 PR, 245 FLEDGED. 1996: 271 PR, 92 FLEDGED.

Owner/Manager: DPR-DOCKWEILER SB

Occurrence No.	13	Map Index: 01562	EO Index: 25698	Element Last Seen:	1977-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1978-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-10-21

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.97988 / -118.42637	Accuracy:	non-specific area
UTM:	Zone-11 N3760842 E368241	Elevation (ft):	10
PLSS:	T02S, R15W, Sec. 23 (S)	Acres:	3.5

Location: BEETHOVEN ST FILL. BALLONA CR.

Detailed Location:

Ecological: NESTING AREA TRIANGULARLY BORDERED BY BALLONA CREEK, FLOOD CONTROL CHANNEL, AND A FENCE. SUBSTRATE IS LIGHT COLORED, SANDY DREDGE MATERIAL WITH SPARSE VEGETATION COVER.

General: FIRST YEAR OF CONFIRMED NESTING HERE; POTENTIAL GOOD, EVEN THOUGH 3 PAIR FLEDGED 0. IN 1978 LARGE MOUNDS OF SANDY DREDGE MATERIAL WERE PLACED ON THE SITE RENDERING THE AREA UNSUITABLE FOR NESTING.

Owner/Manager: DFG-BALLONA WETLANDS ER



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	14	Map Index:	01492	EO Index:	13026	Element Last Seen:	1981-XX-XX
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:	1987-XX-XX	Record Last Updated:	2012-12-10
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.96411 / -118.44601		Accuracy:	non-specific area			
UTM:	Zone-11 N3759118 E366401		Elevation (ft):	3			
PLSS:	T02S, R15W, Sec. 27, SW (S)		Acres:	108.0			
Location:	MOUTH OF BALLONA CREEK, BETWEEN MARINA DEL REY ON THE NORTH & DEL REY BLUFFS ON THE SOUTH.						
Detailed Location:	1965 OBSERVATION FROM MARINA DEL REY NEAR HARBOR AREA & BALLONA CREEK. IN 1970'S-80'S TERNS USED SALT/MUD FLATS WITHIN MARSH. BREEDING AREAS ARE SUBJECT TO FLOODING IF BALLONA CREEK TIDE GATES ARE OPENED DURING BREEDING SEASON. AREA B.						
Ecological:	TERNS NEST AND ROOST ON SALT/MUD FLATS; FEED IN THE MARINA, BALLONA CREEK, BALLONA LAGOON, AND CANALS IN THE AREA.						
General:	1965: BIRDS OBS. 1973-75 & 79-84: MEAN OF 11 PRS/YR. 1976: SITE ABANDONED. 1977: NO NESTING. 1978: 25-30 PRS, 30 FLEDGED. 1981-82: BREEDING AREA FLOODED. 1987: NO NESTING. NO MENTION OF THIS AREA IN MONITORING REPORTS AFTER 1987.						
Owner/Manager:	DFG-BALLONA WETLANDS ER						
Occurrence No.	16	Map Index:	02005	EO Index:	25695	Element Last Seen:	1985-07-31
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:	1987-XX-XX	Record Last Updated:	1998-10-20
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	San Pedro (3311863), Torrance (3311873)						
County Summary:	Los Angeles						
Lat/Long:	33.75057 / -118.25508		Accuracy:	1/5 mile			
UTM:	Zone-11 N3735207 E383754		Elevation (ft):	5			
PLSS:	T05S, R13W, Sec. 09 (S)		Acres:	0.0			
Location:	REEVES FIELD ON TERMINAL ISLAND. TAKE TERMINAL ISLAND FREEWAY TO SEASIDE BLVD.						
Detailed Location:							
Ecological:	SITE NOW A PARKING AREA FOR IMPORTED CARS.						
General:	1974:10-12 PR; 1975: 24 PR; 1976: 60 PR ~80 FLEDGED; 1977: 85 PR, ~80 FLEDGED; 0 PR 1978-80 & 1982. 1981: ~45 PR, ~7 FLEDGED. 46 NESTS IN 1983, GOOD FLEDGING. 28 NESTS IN 1984, MOST YOUNG LOST TO KESTREL. 23 NESTS IN 1985.						
Owner/Manager:	PVT						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	20	Map Index: 02190	EO Index: 25690	Element Last Seen:	1977-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-10-20
Quad Summary:	Long Beach (3311872)				
County Summary:	Los Angeles, Pacific Ocean				
Lat/Long:	33.75511 / -118.13792		Accuracy:	80 meters	
UTM:	Zone-11 N3735585 E394612		Elevation (ft):	10	
PLSS:	T05S, R12W, Sec. 09, N (S)		Acres:	0.0	
Location:	BELMONT SHORE BEACH AT FOOT OF CORONA AVE, LONG BEACH.				
Detailed Location:					
Ecological:	SITE SERVES AS A NIGHT ROOST FOR UP TO 280 TERNS, BEFORE AND AFTER NESTING.				
General:	MANY FLEDGLINGS PRESENT (UP TO 25%) AFTER NESTING.				
Owner/Manager:	UNKNOWN				
Occurrence No.	63	Map Index: 02008	EO Index: 25657	Element Last Seen:	1996-08-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1996-08-01
Occ. Type:	Natural/Native occurrence		Trend: Increasing	Record Last Updated:	1998-10-20
Quad Summary:	San Pedro (3311863), Long Beach (3311872)				
County Summary:	Los Angeles				
Lat/Long:	33.73862 / -118.25258		Accuracy:	1/5 mile	
UTM:	Zone-11 N3733879 E383970		Elevation (ft):		
PLSS:	T99X, R99X, Sec. UN (X)		Acres:	0.0	
Location:	TERMINAL ISLAND LANDFILL SITE SOUTH OF FERRY STREET & EAST OF EARLE STREET (AKA FERRY STREET SITE).				
Detailed Location:					
Ecological:	SITE CREATED BY INTRODUCTION OF NEW LANDFILL IN ABOUT 1980.				
General:	1982: 70 NESTS, 15 FLDGD; 1983: 45 NESTS, 30 FLDGD; 1984: 105 NESTS, GOOD FLDGNG; 1985: 76 NESTS, GOOD FLDGNG; 1987: 40 PR, POOR FLDGNG. 1988: 4-6 PR, ABANDONED. 1990: 32 PR, 12 FLDGD. 1991: 2 PR. 1992: 0 PR. 1996: 56 PR, 50 FLDGD.				
Owner/Manager:	DOD-NAVY				
Occurrence No.	78	Map Index: 01942	EO Index: 14719	Element Last Seen:	1977-08-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-08-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-10-20
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.78585 / -118.29271		Accuracy:	specific area	
UTM:	Zone-11 N3739162 E380318		Elevation (ft):	30	
PLSS:	T04S, R13W, Sec. 31 (S)		Acres:	55.0	
Location:	HARBOR LAKE IN HARBOR PARK.				
Detailed Location:	BIRDS USE THE MUDFLATS ALONG THE SHORELINE.				
Ecological:	A MAJOR POST-BREEDING FORAGING AREA FOR THE BIRDS FROM THE TERMINAL ISLAND COLONY, WHICH APPEAR TO MOVE HERE AS SOON AS THE YOUNG ARE ABLE TO FLY.				
General:	TERNs OBSERVED HERE IN AUG 1975. 100-125 TERNS (INCLUDING 33 JUVENILES) OBSERVED 22 JULY 1976. 25 ADULTS & 25 JUVENILES OBSERVED 3 AUG 1977.				
Owner/Manager:	CITY OF LOS ANGELES				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Coccyzus americanus occidentalis</i>		Element Code: ABNRB02022	
western yellow-billed cuckoo			
Listing Status:	Federal: Threatened	CNDDB Element Ranks:	Global: G5T2T3
	State: Endangered		State: S1
	Other: BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.		
	Micro: NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, WITH LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.		

Occurrence No.	201	Map Index: 95877	EO Index: 97015	Element Last Seen:	1921-06-15
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1921-06-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-04-13
Quad Summary:	Long Beach (3311872)				
County Summary:	Los Angeles				
Lat/Long:	33.83475 / -118.21869		Accuracy:	1 mile	
UTM:	Zone-11 N3744502 E387235		Elevation (ft):	30	
PLSS:	T04S, R13W, Sec. 14 (S)		Acres:	0.0	
Location:	DOMINGUEZ.				
Detailed Location:	MAPPED GENERALLY TO GIVEN LOCALITY; EXACT COLLECTION LOCATION UNKNOWN.				
Ecological:	ORIGINAL COLLECTION CARD READS, "NEST SITUATED 12 FEET UP IN WILD GRAPE VINE, OVERGROWING A SWAMP WILLOW. COMPOSED OF STICKS, TWIGS, SKELETONIZED LEAVES AND BITS OF FUZZY BARK. VERY FRAIL, IN FACT MERELY A COLLECTION OF RUBBISH IN CROTCH."				
General:	SET OF 3 EGGS COLLECTED ON 15 JUN 1921; A BIRD (PRESUMED FEMALE) WAS AT THE NEST.				
Owner/Manager:	UNKNOWN				

Occurrence No.	202	Map Index: 95887	EO Index: 97020	Element Last Seen:	1915-05-31
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1915-05-31
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-05-08
Quad Summary:	Long Beach (3311872), Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.79760 / -118.23940		Accuracy:	1 mile	
UTM:	Zone-11 N3740405 E385269		Elevation (ft):	30	
PLSS:	T04S, R13W, Sec. 28 (S)		Acres:	0.0	
Location:	VICINITY OF WATSON, WATSON JUNCTION, WILMINGTON, AND DOMINGUEZ CHANNEL.				
Detailed Location:	JAY SPECIMENS (1902-1910) WITH LOCALITIES "WATSON'S" AND "WATSON'S PASTURE" ATTRIBUTED HERE. JAY'S 1911 ARTICLE PLACES THE MOST PRODUCTIVE HABITAT "NEAR THE OLD TOWN OF WILMINGTON." MILLER (1915) COLLECTION FROM "DOMINGUEZ SLOUGH."				
Ecological:	NESTS IN WILLOWS, MADE OF SMALL STICKS & LINED W/ WILLOW LEAVES &/OR GRASSES. HABITAT MOSTLY 2ND-GROWTH WILLOWS IN SWAMPS & RIVER BOTTOMS WITHIN A FEW MILES OF THE OCEAN. NESTS FOUND JUN-JUL, THOUGH JAY FOUND NESTS 10 MAY 1901 & 7 AUG 1910.				
General:	2 EGG SETS (6 EGGS) COLLECTED 1902. 2 SETS (6 EGGS) COLLECTED 1903. 2 SETS (6 EGGS), 1904. 3 SETS (6 EGGS), 1905. 4 SETS COLLECTED, 1906. 2 SETS (6 EGGS), 1907. 2 SETS (9 EGGS), 1910. ADULT COLLECTED 31 MAY 1915.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	203	Map Index: 95888	EO Index: 97028	Element Last Seen: 1923-06-23
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1923-06-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-04-13

Quad Summary: Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.79604 / -118.20500	Accuracy:	non-specific area
UTM:	Zone-11 N3740194 E388452	Elevation (ft):	10
PLSS:	T04S, R13W, Sec. 26 (S)	Acres:	916.0

Location: LOS ANGELES RIVER NEAR LONG BEACH.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS A BEST GUESS ALONG THE CHANNELIZED PORTION OF LOS ANGELES RIVER NEAR LONG BEACH. HISTORICAL TOPO MAPS SHOW THAT BY THE EARLY 1920'S THE MAIN FLOW OF THE RIVER HAD ALREADY BEEN CONFINED HERE.

Ecological: NEST DESCRIBED AS A THIN PLATFORM OF SMALL STICKS, 12 FEET UP IN A WILLOW TREE.

General: BIRD FLUSHED FROM NEST, 4 EGGS COLLECTED ON 23 JUN 1923.

Owner/Manager: UNKNOWN

Occurrence No.	204	Map Index: 01965	EO Index: 97029	Element Last Seen: 1910-07-24
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1910-07-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-06-03

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.90327 / -118.22273	Accuracy:	1 mile
UTM:	Zone-11 N3752103 E386952	Elevation (ft):	70
PLSS:	T03S, R13W, Sec. 15 (S)	Acres:	0.0

Location: VICINITY OF COMPTON.

Detailed Location: EXACT COLLECTION LOCATIONS UNKNOWN, MAPPED GENERALLY TO GIVEN LOCALITY, "NEAR COMPTON."

Ecological: NEST MADE OF "FINE STICKS, LINED WITH ROOTLETS," FOUND "IN WILLOW BUSH."

General: 3 EGGS COLLECTED 14 JUL 1907. 2 EGGS COLLECTED ON 24 JUL 1910.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Athene cucularia</i>		Element Code: ABNSB10010	
burrowing owl			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4
	State: None		State: S3
Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General:	OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.	
	Micro:	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.	

Occurrence No.	67	Map Index:	85090	EO Index:	25454	Element Last Seen:	2010-10-XX
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:	2011-XX-XX	Record Last Updated:	2012-12-14
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing				

Quad Summary:	Venice (3311884)		
County Summary:	Los Angeles		
Lat/Long:	33.96964 / -118.43652	Accuracy:	non-specific area
UTM:	Zone-11 N3759720 E367287	Elevation (ft):	5
PLSS:	T02S, R15W, Sec. 27 (S)	Acres:	609.0
Location:	BALLONA WETLANDS ECOLOGICAL RESERVE, NEAR PLAYA DEL REY, LOS ANGELES.		
Detailed Location:	PRIMARILY AREA A & B, BUT DETECTIONS NEAR UCLA BOATHOUSE AND FURTHER EAST BY LMU AND THE WESTCHESTER BLUFFS. FIRST INDIVIDUAL COMPLETELY OVER-WINTERING IN 20 YEARS DOCUMENTED 2005-2006.		
Ecological:	PAIRS NEST IN BANKS ON NORTH SIDE OF BALLONA CREEK, WEST OF CULVER BLVD; ADDITIONAL OWLS PROBABLY NEST ON BLUFFS SOUTH OF THE AGRICULTURAL LANDS ON THE SOUTH SIDE OF BALLONA CREEK (SCH81R0001). ONE OF LAST PLACES IN LA CO FOR SPECIES.		
General:	POP STABLE & BREEDING UNTIL 1981 (SCH81R01) SUPPORTED BY DETECTIONS IN MAR 1981, JUL 1982, MAR 1983, OCT 1983. NOW EXTIRPATED AS BREEDER, BUT DETECTIONS OF OWLS, FEWER & IN WINTER, IN 2003, 2004, 2005, 2006, 2007, 2008, 2009 & 2010.		
Owner/Manager:	DFG-BALLONA WETLANDS ER		

Occurrence No.	571	Map Index:	51258	EO Index:	51258	Element Last Seen:	1921-05-05
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1921-05-05	Record Last Updated:	2003-05-09
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary:	South Gate (3311882), Inglewood (3311883), Los Angeles (3411812), Hollywood (3411813), Pasadena (3411822), Burbank (3411823)		
County Summary:	Los Angeles		
Lat/Long:	34.05366 / -118.24549	Accuracy:	5 miles
UTM:	Zone-11 N3768805 E385050	Elevation (ft):	280
PLSS:	T01S, R13W, Sec. 28 (S)	Acres:	0.0
Location:	HERMON HILLS, LOS ANGELES.		
Detailed Location:	UNABLE TO FIND ANY REFERENCE TO "HERMON HILLS". NO OTHER LOCATION INFORMATION GIVEN. MAPPED AS A 5 MILE RADIUS CIRCLE AT THE LAT/ LONG COORDINATES GIVEN IN MVZ RECORDS (MAX ERROR DISTANCE GIVEN AS 40 MILES).		
Ecological:			
General:	MVZ EGG SET #3843 COLLECTED 28 APR 1919 BY ALDEN H. MILLER. MVZ EGG SET #3844 COLLECTED 5 MAY 1921 BY ALDEN H. MILLER.		
Owner/Manager:	UNKNOWN		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Empidonax traillii extimus</i>		Element Code: ABPAE33043	
southwestern willow flycatcher			
Listing Status:	Federal: Endangered	CNDDDB Element Ranks:	Global: G5T2
	State: Endangered		State: S1
	Other: NABCI_RWL-Red Watch List		
Habitat:	General: RIPARIAN WOODLANDS IN SOUTHERN CALIFORNIA.		
	Micro: <input type="checkbox"/>		

Occurrence No.	42	Map Index:	01965	EO Index:	59152	Element Last Seen:	1895-06-29
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1895-06-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-01-04	
Quad Summary:	South Gate (3311882)						
County Summary:	Los Angeles						
Lat/Long:	33.90327 / -118.22273		Accuracy:	1 mile			
UTM:	Zone-11 N3752103 E386952		Elevation (ft):				
PLSS:	T03S, R13W, Sec. 15 (S)		Acres:	0.0			
Location:	COMPTON.						
Detailed Location:	NO OTHER LOCATION INFORMATION GIVEN, MAPPED IN THE GENERAL VICINITY OF COMPTON & THE LAT-LONG COORDINATES GIVEN BY MVZ. LOCATION UNCERTAINTY GIVEN AS 1.5 MILES.						
Ecological:							
General:	MVZ #649, NEST PLUS EGGS, COLLECTED 29 JUN 1895 BY W. B. JUDSON.						
Owner/Manager:	UNKNOWN						

Occurrence No.	43	Map Index:	51258	EO Index:	59153	Element Last Seen:	1894-05-20
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1894-05-20	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-01-05	
Quad Summary:	South Gate (3311882), Inglewood (3311883), Los Angeles (3411812), Hollywood (3411813), Pasadena (3411822), Burbank (3411823)						
County Summary:	Los Angeles						
Lat/Long:	34.05366 / -118.24549		Accuracy:	5 miles			
UTM:	Zone-11 N3768805 E385050		Elevation (ft):	280			
PLSS:	T01S, R13W, Sec. 28 (S)		Acres:	0.0			
Location:	LOS ANGELES.						
Detailed Location:	NO OTHER LOCATION INFORMATION GIVEN, MAPPED IN THE GENERAL VICINITY OF LOS ANGELES.						
Ecological:							
General:	MVZ #2205 (EGG SET), COLLECTED 20 MAY 1894 BY R. H. ROBERTSON. MVZ #136340 (STUDY SKIN) COLLECTED JUNE 1852 BY G. A. MCCALL.						
Owner/Manager:	UNKNOWN						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Riparia riparia		Element Code: ABPAU08010	
bank swallow			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: Threatened		State: S2
	Other: BLM_S-Sensitive, IUCN_LC-Least Concern		
Habitat:	General: COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.		
	Micro: REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.		

Occurrence No.	3	Map Index: 84452	EO Index: 85481	Element Last Seen:	1919-06-29
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1919-06-29
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06
Quad Summary:	Long Beach (3311872)				
County Summary:	Los Angeles				
Lat/Long:	33.76402 / -118.16737		Accuracy:	1 mile	
UTM:	Zone-11 N3736603 E391895		Elevation (ft):	60	
PLSS:	T05S, R12W, Sec. 07 (S)		Acres:	0.0	
Location:	OCEAN BLUFF NEAR BIXBY PARK, LONG BEACH.				
Detailed Location:	LOCATION STATED AS "LONG BEACH, LOS ANGELES CO" AND "OCEAN BLUFF NEAR BIXBY PARK."				
Ecological:	NEST WAS LOCATED IN THE BACK OF A HOLE ABOUT 18 INCHES DEEP. NEST WAS COMPOSED OF SEAWEED AND STRAW WITH A HEAVY LINING OF WHITE FEATHERS. EGGS WERE COLLECTED, BUT COULD NOT BE SAVED.				
General:	NEST WITH 4 EGGS COLLECTED ON 29 JUN 1919 FROM A NESTING COLONY; STAGE OF NESTING AT THE TIME WAS NOTED AS NEW NESTS TO SOME NESTS WITH LARGE YOUNG.				
Owner/Manager:	CITY OF LONG BEACH, UNKNOWN				

Occurrence No.	102	Map Index: 84233	EO Index: 85259	Element Last Seen:	1921-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1921-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-02
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.72983 / -118.27637		Accuracy:	1 mile	
UTM:	Zone-11 N3732933 E381753		Elevation (ft):	20	
PLSS:	T99X, R99X, Sec. UN (X)		Acres:	0.0	
Location:	AREA OF SAN PEDRO AND DEAD MANS ISLAND (RESERVATION POINT), LOS ANGELES COUNTY.				
Detailed Location:	WFVZ EGG SETS: "L.A. AND SAN PEDRO ROAD," "ON L.A. AND SAN PEDRO ROAD NEAR S.P," & SAN PEDRO." SHEPARDSON: "LARGE COLONY WAS NESTING ON DEAD MAN'S ISLAND AND IN THE BANKS AT THE LUMBER YARDS IN SAN PEDRO."				
Ecological:	AERIAL IMAGE (2010) SHOWS THAT THE AREA HAS BEEN DEVELOPED. DEAD MAN'S ISLAND IS NOW CALLED RESERVATION POINT AND THE EAST SIDE OF MAIN CHANNEL HAS SINCE BEEN FILLED IN AND DEVELOPED ALONG WITH OTHER PORTIONS OF SAN PEDRO BAY.				
General:	2 LARGE COLONIES OBS BY SHEPARDSON: APR-JUN, 1908-09. 4 WFV EGG SETS: 1 TAKEN BY WILLET (1904), 1 TAKEN BY SNYDER (1909), 2 TAKEN BY NOKES (1915). COLONY OBS NESTING IN 1921. CONSIDERED EXTIRPATED AS A SOUTHERN CALIFORNIA BREEDER (SCH92).				
Owner/Manager:	UNKNOWN				

Polioptila californica californica		Element Code: ABPBJ08081	
coastal California gnatcatcher			
Listing Status:	Federal: Threatened	CNDDB Element Ranks:	Global: G4G5T3Q
	State: None		State: S2



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Habitat:	Other: CDFW_SSC-Species of Special Concern, NABCI_YWL-Yellow Watch List
	General: OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.
	Micro: LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.

Occurrence No.	30	Map Index: 01686	EO Index: 29840	Element Last Seen:	2018-06-18
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2018-06-18
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	2021-01-29

Quad Summary: San Pedro (3311863), Torrance (3311873), Redondo Beach (3311874)
County Summary: Los Angeles

Lat/Long:	33.74530 / -118.39689	Accuracy:	non-specific area
UTM:	Zone-11 N3734792 E370611	Elevation (ft):	350
PLSS:	T05S, R14W, Sec. 18 (S)	Acres:	865.0

Location: PALOS VERDES PENINSULA NEAR PT VINCENTE & LONG PT, NE TO CREST RD (INCLUDING MCCARRELLS CYN), RANCHO PALOS VERDES.
Detailed Location: PALOS VERDES DR W, PALOS VERDES DR S, HAWTHORNE BLVD. RECENT DATA FROM PT VINCENTE PARK/CIVIC CENTER ('98 & 06), PENINSULA POINTE (ALBERO CT, '97-06), & BARKENTINE CYN PRESERVE ('00 & 06).
Ecological: MOST FOUND IN AREAS OF SAGEBRUSH OR CACTUS SCRUB IN 1993-95 PENINSULA SURVEY. DOMINATED BY ARTEMISIA CALIFORNICA, ERIOGONUM FASCICULATUM, & SALVIA MELLIFERA. SOME AREAS NOW OPEN SPACE (PVPLC.ORG). MCCARRELL'S CYN (BARKENTINE) SIG HABITAT.
General: 1980: 5PRS. '90: 24BRDS. '91: 2PRS. '93:13PRS. '95: 8PRS. '96: 11PRS. '97: 5 TERR, 6NEST, 19FLDG. '98: 4PRS. '00: 24BRDS. '01:7PRS. '02: 7TERR. '03: 7PRS. '04: 13 BRDS. '06: 67 OBS. '09: 2PRS. '11: 1PR. '12: 34 OBS. '16: 1PR. '18: 4PRS.
Owner/Manager: CITY OF RANCHO PALOS VERDES

Occurrence No.	31	Map Index: 15982	EO Index: 29841	Element Last Seen:	2012-06-05
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2012-06-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2021-02-12

Quad Summary: Redondo Beach (3311874)
County Summary: Los Angeles

Lat/Long:	33.76465 / -118.39907	Accuracy:	non-specific area
UTM:	Zone-11 N3736941 E370438	Elevation (ft):	600
PLSS:	T05S, R15W, Sec. 12 (S)	Acres:	160.0

Location: AGUA AMARGA CANYON, PALOS VERDES PENINSULA, PALOS VERDES ESTATES & RANCHO PALOS VERDES.
Detailed Location: 1993-95 STUDY: AGUA AMARGA CYN WAS 1 OF 3 CYN'S THAT SUPPORTED MOST OF THE PALOS VERDES PENINSULA BREEDING POPULATION. FWS DIGITAL DATA: 9 AUG 06 SITE NAME PORTUGUESE BEND NATURE PRESERVE; 9 APR 06 AT 29941 HAWTHORNE BLVD.
Ecological: HABITAT WAS COASTAL SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFORNICA, ERIOGONUM FASCICULATUM, AND SALVIA MELLIFERA. THIS AREA IS CRITICAL TO THE SURVIVAL OF GNATCATCHERS ON THE PALOS VERDES PENINSULA. MUCH NOW IN OPEN SPACE PRESERVES IN 2008.
General: 1980: 3 PRS OBS, 5-10 PRS EST. 1993: 8 PRS OBS. 1995: 4 PRS OBS. POOR SURVIVAL OF ADULTS & JUV'S DURING WINTER OF 1994-95. 1996: 4 PRS OBS. 2006: 2 PRS, 4 INDIVIDUALS, AND 1 DISPERSING JUVENILE OBS. 2012: 1 DETECTED.
Owner/Manager: CITY OF RANCHO PALOS VERDES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	33	Map Index: 01805	EO Index: 25114	Element Last Seen:	1980-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1980-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2008-05-19
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.76757 / -118.35841		Accuracy:	non-specific area	
UTM:	Zone-11 N3737214 E374208		Elevation (ft):	750	
PLSS:	T05S, R14W, Sec. 09 (S)		Acres:	152.0	
Location:	SUNNYRIDGE RD, AGUA MAGNA CANYON NEAR ROLLING HILLS, VICINITY OF PALOS VERDES.				
Detailed Location:	MAPPED TO PROVIDED MAP & 1994 AERIAL IMAGES.				
Ecological:	HABITAT IS COASTAL SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFORNICA, ERIOGONUM FASCICULATUM, AND SALVIA MELLIFERA.				
General:	1-2 PAIRS OBSERVED; 5-10 PAIRS ESTIMATED.				
Owner/Manager:	UNKNOWN				
Occurrence No.	34	Map Index: 01865	EO Index: 21796	Element Last Seen:	2012-05-14
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2012-05-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2021-02-02
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.72940 / -118.33958		Accuracy:	non-specific area	
UTM:	Zone-11 N3732958 E375896		Elevation (ft):	200	
PLSS:	T05S, R14W, Sec. 22 (S)		Acres:	522.0	
Location:	BETWEEN MARYMOUNT SCHOOL TO THE N, THE OCEAN TO THE S & W, & THE CITY/CORP BOUNDRY TO THE E, RANCHO PALOS VERDES.				
Detailed Location:	INCLUDES SWITCHBACKS OPEN SPACE & SHORELINE PARK. ATW80 SITE NAME KLOS. UPDATED W/ 61 FWS DIGITAL POLYGONS, SITE NAMES OCEAN TRAILS HCP ('97-98), FRIENDSHIP COMM REG PARK ('04), TRUMP NAT'L GOLF COURSE ('05), PORTEGUESE BEND NAT PRES ('06).				
Ecological:	HABITAT IS COASTAL SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFORNICA, ERIOGONUM FASCICULATUM, ISOCOMA VENETA, ENCELIA CALIFORNICA, SALVIA MELLIFERA; LESSER AMOUNTS OF ERIOGONUM CINEREUM, MALOSMA LAURINA. HABITAT QUALITY: EXCELLENT TO POOR.				
General:	1980: 7 PRS, EST 10-13 PRS. '90: 6 BRDS, 1 TERR. '91: 3 PRS. '92: 3-4 PRS. '93: 7 PRS. '95: 3 PRS. POOR SURVIVAL WINTER '94-95. '96: 9 PRS. '97: SEP-OCT, 15 DETECTED. '98: 8PRS & 1 MALE. '04: 1 PR. '05: 15PRS. '06: 88 OBS. '12: 4 OBS.				
Owner/Manager:	CITY OF RANCHO PALOS VERDES				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	35	Map Index: 01722	EO Index: 25112	Element Last Seen:	1980-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1980-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	33.99055 / -118.38285	Accuracy:	1 mile
UTM:	Zone-11 N3761970 E372277	Elevation (ft):	200
PLSS:	T02S, R14W, Sec. 18, SE (S)	Acres:	0.0

Location: BALDWIN HILLS, VICINITY CULVER CITY.

Detailed Location:

Ecological: HABITAT IS COASTAL SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFORNICA, ERIOGONUM FASCICULATUM, AND SALVIA MELLIFERA.

General: ONE INDIVIDUAL OBSERVED; 1-3 PAIRS ESTIMATED.

Owner/Manager: UNKNOWN

Occurrence No.	108	Map Index: 01741	EO Index: 29842	Element Last Seen:	2018-05-18
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2018-05-18
Occ. Type:	Natural/Native occurrence		Trend: Stable	Record Last Updated:	2021-02-02

Quad Summary: San Pedro (3311863), Torrance (3311873), Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.74529 / -118.35486	Accuracy:	non-specific area
UTM:	Zone-11 N3734739 E374504	Elevation (ft):	800
PLSS:	T05S, R14W, Sec. 16 (S)	Acres:	877.0

Location: BOUNDED BY ABALONE COVE, PORTUGUESE BEND, SAN PEDRO HILL, ROLLING HILLS, & ALTAMIRA CYN ON PALOS VERDES PENINSULA.

Detailed Location: KLONDIKE CANYON IS CRITICAL TO SURVIVAL OF GNATCATCHERS ON PALOS VERDES PENINSULA. 2000 SITE NAME UPPER FILIORUM. 2006 SITE NAME PORTUGUESE BEND NATURE PRESERVE.

Ecological: HABITAT: COASTAL SAGE SCRUB DOMINATED BY ARTEMISIA CALIFORNICA, ERIOGONUM FASCICULATUM, ATRIPLEX LENTIFORMIS, ENCELIA CALIFORNICA, RHUS INTEGRIFOLIA, AND SALVIA MELLIFERA. MANY AREAS NOW NATURE & OPEN SPACE PRESERVES (PVPLC.ORG).

General: 1972: 2UNK. '80: 5PRS & 3INDIV, EST 15-25PRS. '90: 21INDIV, 5 TERR. '91: 1PR. '92: 4INDIV. '93: 18PRS. '95: 11PRS. '96: 14PRS. '00: 2PRS. '06: 121INDIV. '09: 7PRS. '10: 11PRS. '11: 11PRS. '12: 12 INDIV. '15: 5PRS. '18: 3INDIV.

Owner/Manager: CITY OF RANCHO PALOS VERDES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	450	Map Index: 24341	EO Index: 6520	Element Last Seen:	2020-01-28
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2020-01-28
Occ. Type:	Natural/Native occurrence		Trend: Stable	Record Last Updated:	2020-12-10
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.77287 / -118.30204		Accuracy:	non-specific area	
UTM:	Zone-11 N3737734 E379435		Elevation (ft):	150	
PLSS:	T05S, R14W, Sec. 01 (S)		Acres:	274.0	
Location:	DEFENSE FUEL SUPPLY POINT, SOUTH OF PALOS VERDES DRIVE N, & WEST OF GAFFEY STREET, SAN PEDRO.				
Detailed Location:	MAPPED TO FWS DIGITAL POLYS, HISTORICAL DATA, & AVAIL. HABITAT IN AERIAL IMAGES ('94, '07). IN 1993 SITE WAS ESTIMATED TO HOLD 10% OF TOTAL PALOS VERDES PENINSULA POPULATION. HABITAT RESTORATION EFFORTS UNDERWAY (WWW.PVPLC.ORG/LAND/DFSP).				
Ecological:	HABITAT CONSISTS OF COASTAL SAGE SCRUB. PATCH TO THE SOUTH IS DOMINATED BY ARTEMISIA CALIFORNICA. SITE DISTURBED BY INVASIVE PLANTS & HUMAN DISTURBANCE. LAND USE INCLUDES MILITARY & SOME OPEN SPACE. PALOS VERDES BLUE BUTTERFLY POP PRESENT.				
General:	1993: 28 APR, 5 PRS OBS (7 PRS EST). 2002: 27 AUG, 2 ADULTS(?) OBS. 2003: MAY-JUN, 10 ADULTS, 4 JUV'S, & 4 UNK AGE OBS. 2005: 2 INDIV OBS. 2015: 4-7 PAIRS EST. 2018: 1 JUV OBS. 2019: 1 PR W/ 3 JUV OBS. 2020: 1 FEMALE ADULT OBS.				
Owner/Manager:	DOD-NAVY				
Occurrence No.	891	Map Index: 71336	EO Index: 72239	Element Last Seen:	2006-04-21
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2012-05-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-12-10
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.76937 / -118.37214		Accuracy:	non-specific area	
UTM:	Zone-11 N3737431 E372940		Elevation (ft):	1050	
PLSS:	T05S, R14W, Sec. 5, SE (S)		Acres:	9.0	
Location:	ALONG INDIAN PEAK RD NORTHWEST OF CRENSHAW BLVD, VISTA DEL NORTE RESERVE, PALOS VERDES HILLS, RANCHO PALOS VERDES.				
Detailed Location:	MAPPED ACCORDING TO MAP PROVIDED. SITE NAME: CRESTRIDGE ESTATES PROJECT SITE.				
Ecological:	CAGN OBSERVED IN STRIP OF COASTAL SAGE SCRUB ALONG INDIAN PEAK RD. OPEN SPACE PRESERVE WITH HIKING TRAILS AND SURROUNDED BY RESIDENTIAL AND COMMERCIAL DEVELOPMENT. ADJACENT AREA SOUTH OF SITE WAS DEVELOPED IN 2013-2015.				
General:	2 INDIVIDUALS OBSERVED ON 13 APR 2006. 1 INDIVIDUAL OBSERVED ON 21 APR 2006. NONE DETECTED DURING GNATCATCHER SURVEYS ON 3 APR AND 22 MAY 2012.				
Owner/Manager:	CITY OF RANCHO PALOS VERDES				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	892	Map Index: 71337	EO Index: 72240	Element Last Seen:	1993-11-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1993-11-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2021-02-16
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.78269 / -118.40507		Accuracy:	non-specific area	
UTM:	Zone-11 N3738949 E369909		Elevation (ft):	650	
PLSS:	T04S, R15W, Sec. 36 (S)		Acres:	15.0	
Location:	BETWEEN VIA ZURITA & VIA CORONEL, CORONEL CANYON, PALOS VERDES PENINSULA.				
Detailed Location:	MAPPED TO PROVIDED MAP. LOCALITY: CORONEL CANYON; REFERENCE # 357.				
Ecological:	FROM 2007 AERIAL IMAGE, APPEARS TO BE A REMNANT PATCH (APPROX. 10 ACRES) OF COASTAL SAGE SCRUB, NOW CITY PARKLAND.				
General:	1 PAIR DETECTED DURING FIELD WORK CONDUCTED BETWEEN DEC 1979 - DEC 1980 IN WINTER, SPRING & FALL. 1 PAIR DETECTED BETWEEN FEB AND NOV 1993. NEEDS MODERN FIELD INVESTIGATION AND REPORTING.				
Owner/Manager:	CITY OF PALOS VERDES ESTATES				
Occurrence No.	1031	Map Index: B6262	EO Index: 119312	Element Last Seen:	2011-02-14
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2011-02-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-11-09
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.97821 / -118.4337		Accuracy:	80 meters	
UTM:	Zone-11 N3760666 E367562		Elevation (ft):	16	
PLSS:	T02S, R15W, Sec. 22, SE (S)		Acres:	5.0	
Location:	JUST NORTH OF LINCOLN BLVD AT CLUVER BLVD, BALLONA WETLANDS ECOLOGICL RESERVE, MARINA DEL REY.				
Detailed Location:	ATTRIBUTED 1888 SPECIMEN COLLECTED FROM PORT BALLONA.				
Ecological:	OPEN SPACE PRESERVE SURROUNDED BY MARINA/COMMERICAL DEVELOPMENT. AREA RECIEVED FILL SOIL FROM BALLONA CREEK EXCAVATION DURING 1930S AND HAS SINCE GROWN BACK TO COASTAL SCRUB. HOMELESS ENCAMPMENTS LOCATED DIRECTLY WITHIN HABITAT.				
General:	COLLECTED FROM THE VICINITY IN 1888. 2 INDIVIDUALS OBSERVED AND HEARD BETWEEN 23 OCT 2010 AND 14 FEB 2011.				
Owner/Manager:	DFG-BALLONA WETLANDS ER				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1032	Map Index: B6263	EO Index: 119313	Element Last Seen:	2011-03-18
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2011-03-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-11-09

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.97389 / -118.43598	Accuracy:	80 meters
UTM:	Zone-11 N3760190 E367345	Elevation (ft):	14
PLSS:	T02S, R15W, Sec. 27, NE (S)	Acres:	5.0

Location: JUST SOUTHWEST OF LINCOLN BLVD AT CLUVER BLVD, BALLONA WETLANDS ECOLOGICL RESERVE, MARINA DEL REY.

Detailed Location: ATTRIBUTED 1888 SPECIMEN COLLECTED FROM PORT BALLONA.

Ecological: PATCH OF SCRUB DOMINATED BY CALIFORNIA SAGEBRUSH. OPEN SPACE PRESERVE SURROUNDED BY MARINA/COMMERICAL DEVELOPMENT. AREA HISTORICALLY RECIEVED FILL DURING EXCAVATION OF BALLONA CREEK AND MARINA DEL REY.

General: COLLECTED FROM THE VICINITY IN 1888. 1 INDIVIDUAL OBSERVED ON 18 MAR 2011.

Owner/Manager: DFG-BALLONA WETLANDS ER

Occurrence No.	1033	Map Index: B6264	EO Index: 119314	Element Last Seen:	2013-05-22
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2013-05-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-10-13

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.93889 / -118.43566	Accuracy:	non-specific area
UTM:	Zone-11 N3756308 E367320	Elevation (ft):	151
PLSS:	T03S, R15W, Sec. 3, E (S)	Acres:	93.0

Location: EL SEGUNDO DUNES ESHA, JUST WEST OF THE LOS ANGELES INTERNATIONAL AIRPORT.

Detailed Location:

Ecological: COASTAL DUNE DOMINATED BY SILVER DUNE LUPINE, MOCK HEATHER, BLADDERPOD, BUSH SUNFLOWER, AND FOURWING SALT BUSH. SITE BORDERED BY AIRPORT, THE OCEAN, RESIDENTIAL DEVELOPMENT, AND INDUSTRIAL COMPLEX. NETWORK OF ROADS FRAGMENTS DUNE AREA.

General: 3 MALES AND 1 FEMALE OBSERVED ON 15 MAR 2013. 2 SINGLE MALES AND 1 PAIR WITH NEST AND 3 JUVENILES FOUND BETWEEN 16 APR AND 22 MAY 2013.

Owner/Manager: CITY OF LOS ANGELES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1037	Map Index: B6682	EO Index: 119742	Element Last Seen:	2019-03-01
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2019-03-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-12-10

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.7796 / -118.33624	Accuracy:	specific area
UTM:	Zone-11 N3738521 E376279	Elevation (ft):	389
PLSS:	T05S, R14W, Sec. 3, NW (S)	Acres:	8.0

Location: LINDEN H. CHANDLER PRESERVE, BENT SPRINGS CANYON, ROLLING HILLS ESTATES.

Detailed Location:

Ecological: HABITAT ON SITE CONSISTED LARGELY OF COASTAL SAGE SCRUB. OPEN SPACE PRESERVE WITH HIKING/HORSE TRAILS. PRESERVE IS COMPLETELY SURROUNDED BY RESIDENTIAL DEVELOPMENT AND GOLF COURSE.

General: 1 HEARD CALLING ON 22 FEB 2018. 1 MALE AND FEMALE OBSERVED TOGETHER ON 26 JUL 2018. 1 HEARD CALLING ON 18 JAN 2019 AND ON 1 FEB 2019. 1 ADULT MALE HEARD CALLING AND THEN SEEN ON 1 MAR 2019.

Owner/Manager: CITY OF ROLLING HILLS ESTATES

Occurrence No.	1038	Map Index: B6698	EO Index: 119755	Element Last Seen:	2019-07-08
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2019-07-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-12-11

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles

Lat/Long:	33.71801 / -118.31483	Accuracy:	non-specific area
UTM:	Zone-11 N3731666 E378175	Elevation (ft):	165
PLSS:	T05S, R14W, Sec. 26, E (S)	Acres:	95.0

Location: WHITE POINT NATURE RESERVE, S WESTERN AVE AT W PASEO DEL MAR INTERSECTION, SOUTH OF SAN PEDRO.

Detailed Location:

Ecological: COASTAL SAGE SCRUB AND NON-NATIVE GRASSLAND. LANDSLIDE IN 2011 COLLAPSED ADJACENT PASEO DEL MAR AND IMPACTED 0.005 ACRES OF RESTORED COASTAL SAGE HABITAT. EMERGENCY REPAIR AND DE-WATERING OCCURRED IN 2013-2015.

General: 2 PAIRS OBSERVED IN 2013; 1 PAIR FLEDGED 4 CHICKS. 3 NESTS (2 FAILED, 1 SUCCESS) FOUND IN 2014; 1 PAIR OBS WITH 2 OR 3 FLEDGLINGS. 2 PAIRS (1 WITH JUVENILE) OBS IN 2015. 4 PAIRS AND 7 FLEDGLINGS OBS IN 2018. 9 PAIRS WITH JUV OBS IN 2019.

Owner/Manager: CITY OF LOS ANGELES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1045	Map Index:	01700	EO Index:	119808	Element Last Seen:	1904-10-15
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:	1904-10-15	Record Last Updated:	2020-12-17
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Torrance (3311873), Redondo Beach (3311874)

County Summary: Los Angeles, Pacific Ocean

Lat/Long: 33.82921 / -118.39056 **Accuracy:** 1 mile

UTM: Zone-11 N3744088 E371323 **Elevation (ft):** 50

PLSS: T04S, R14W, Sec. 18 (S) **Acres:** 0.0

Location: VICINITY OF REDONDO BEACH

Detailed Location: GIVEN LOCATIONS "REDONDO" AND "REDONDO BEACH VIC", EXACT LOCATIONS UNKNOWN.

Ecological:

General: 1 MALE ADULT COLLECTED ON 17 DEC 1900. 1 MALE AND 1 FEMALE COLLECTED ON 15 OCT 1904. AREA HAS BEEN HEAVILY DEVELOPED, LIKELY EXTIRPATED.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Vireo bellii pusillus</i>		Element Code: ABPBW01114	
least Bell's vireo			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G5T2
	State: Endangered		State: S2
	Other: IUCN_NT-Near Threatened, NABCI_YWL-Yellow Watch List		
Habitat:	General: SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.		
	Micro: NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.		

Occurrence No.	561	Map Index:	91988	EO Index:	93062	Element Last Seen:	1895-05-23
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1895-05-23	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-04-07	

Quad Summary:	South Gate (3311882), Inglewood (3311883)						
County Summary:	Los Angeles						
Lat/Long:	33.97502 / -118.25006		Accuracy:	1 mile			
UTM:	Zone-11 N3760090 E384522		Elevation (ft):	150			
PLSS:	T02S, R13W, Sec. 21 (S)		Acres:	0.0			
Location:	FLORENCE, WEST OF HUNTINGTON PARK.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED GENERALLY AS BEST GUESS TO PROVIDED LOCATION DESCRIPTION OF "FLORENCE" IN LOS ANGELES COUNTY. MORE SPECIFICALLY, MAPPED TO FLORENCE POST OFFICE.						
Ecological:	MAJORITY OF AREA HAS BEEN DEVELOPED (AERIAL PHOTOS 1994-2013), LEAST BELL'S VIREO IS PROBABLY LOCALLY EXTIRPATED.						
General:	UNKNOWN NUMBER OF EGGS COLLECTED ON 23 MAY 1895 BY V.W. OWEN (WFVZ #115592).						
Owner/Manager:	UNKNOWN						

Occurrence No.	563	Map Index:	92003	EO Index:	93076	Element Last Seen:	2010-10-16
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2014-04-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-04-29	

Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						

Lat/Long:	33.96851 / -118.42325		Accuracy:	specific area			
UTM:	Zone-11 N3759578 E368511		Elevation (ft):	15			
PLSS:	T02S, R15W, Sec. 26, W (S)		Acres:	24.0			

Location:	ALONG DRAINAGE ON EITHER SIDE OF LINCOLN BLVD BETWEEN BLUFF CREEK DR & LMU DR, E OF MARINA DEL REY, BALLONA WETLANDS.						
Detailed Location:	SITE PART OF THE BALLONA FRESHWATER WETLANDS. MAPPED TO PROVIDED COORDINATES. IT IS LIKELY THAT THE NESTS COLLECTED IN OCT (WFVZ #183510-11) WERE THOSE FOUND IN MAY. 1 FEMALE WAS BANDED & PRESUMED TO HAVE FLEDGED AT CAMP PENDLETON IN 2008.						
Ecological:	HABITAT CONSISTED OF RESTORED RIPARIAN AREA. WATER WAS PRESENT DURING THE SURVEYS. ONE ABANDONED NEST WAS LOCATED IN A PLANTED SYCAMORE TREE, NEW NEST WAS CONSTRUCTED IN A PLANTED ALDER. ANOTHER NEST WAS CONSTRUCTED IN AN AREA WITH WILLOWS.						
General:	3 ADULTS & 3 NESTS DETECTED ON MAY-JUL 2010; 1ST NEST CONTAINED 4 EGGS & AT LEAST 2 FLEDGLINGS WERE PRODUCED FROM THE OTHER 2 NESTS. 1 TERRITORIAL MALE ALSO OBS BUT NO NEST WAS FOUND. 2 NESTS COLLECTED ON OCT 2010. 1 DET. APR 2014; MIGRANT.						
Owner/Manager:	DFG-BALLONA WETLANDS ER, PVT						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Passerculus sandwichensis beldingi</i>		Element Code: ABPBX99015	
Belding's savannah sparrow			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5T3
	State: Endangered		State: S3
Other:			
Habitat:	General: INHABITS COASTAL SALT MARSHES, FROM SANTA BARBARA SOUTH THROUGH SAN DIEGO COUNTY.		
	Micro: NESTS IN SALICORNIA ON AND ABOUT MARGINS OF TIDAL FLATS.		

Occurrence No.	7	Map Index:	01492	EO Index:	14649	Element Last Seen:	2001-05-09
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2001-05-09	
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:		2012-12-10	
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.96411 / -118.44601		Accuracy:	non-specific area			
UTM:	Zone-11 N3759118 E366401		Elevation (ft):	5			
PLSS:	T02S, R15W, Sec. 27, SW (S)		Acres:	108.0			
Location:	MOUTH OF BALLONA CREEK, BETWEEN MARINA DEL REY ON THE NORTH & DEL REY BLUFFS ON THE SOUTH.						
Detailed Location:	1991: ALL TERRITORIES FOUND IN NON-TIDALLY INFLUENCED AREA ADJACENT TO THE CHANNELIZED BALLONA CREEK, INLAND FROM THE CHANNEL. 2001: ALL BIRDS IN WETLAND BETWEEN CULVER BLVD & BALLONA CREEK. BALLONS WETLANDS AREA B WEST.						
Ecological:	101 HA SALTMARSH WITH LITTLE TIDAL INFLUENCE. SOME OF THE PICKLEWEED DESSICATING IN 1991. RESTORATION POTENTIAL IS HIGH, AREA NEEDS TIDAL ACTION AND ACTIVE PREDATOR MANAGEMENT.						
General:	POPULATION ESTIMATES: 1973: 25 PRS; 1977: 37 PRS; 1979: 21 PRS; 1980: 18 PRS; 1981: 13 PRS; 1986: 32 PRS; 1987: 29-30 PRS; 1989: 31 PRS; 1990: 12 PRS; 1991: 5 PRS. 1996: 37 PRS. 2001: 13 PRS.						
Owner/Manager:	DFG-BALLONA WETLANDS ER						

Occurrence No.	37	Map Index:	01504	EO Index:	14647	Element Last Seen:	1981-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1981-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-10	
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.97373 / -118.43992		Accuracy:	non-specific area			
UTM:	Zone-11 N3760177 E366979		Elevation (ft):	15			
PLSS:	T02S, R15W, Sec. 27, N (S)		Acres:	128.0			
Location:	BALLONA WETLANDS AREA. PARCEL BOUNDED ON EAST BY HWY 1, ON SOUTH BY BALLONA CRK, ON NORTH & WEST BY FIJI WAY.						
Detailed Location:	AREA A. SMALL BREEDING POPULATIONS IN HOMOGENEOUS STANDS OF SALICORNIA THROUGHOUT THIS PARCEL.						
Ecological:	SUBSEQUENT TO 1987 THIS POPULATION WAS EXTIRPATED. THIS AREA IS NOW INVADED BY UPLAND PLANTS AND IS PROPOSED FOR DEVELOPMENT (1980S). WAS PRIVATELY OWNED; NOW PART OF THE BALLONA WETLANDS ECOLOGICAL RESERVE.						
General:							
Owner/Manager:	DFG-BALLONA WETLANDS ER						

<i>Agelaius tricolor</i>		Element Code: ABPBXB0020	
tricolored blackbird			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1G2
	State: Threatened		State: S1S2
Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Habitat:	General:	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.		
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.		

Occurrence No.	275	Map Index:	24342	EO Index:	6521	Element Last Seen:	198X-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	198X-XX-XX	Record Last Updated:	1993-10-07
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Torrance (3311873)
County Summary: Los Angeles

Lat/Long:	33.78603 / -118.28988	Accuracy:	2/5 mile
UTM:	Zone-11 N3739179 E380580	Elevation (ft):	20
PLSS:	T04S, R13W (S)	Acres:	0.0

Location: HARBOR LAKE, IN THE SAN PEDRO AREA OF LOS ANGELES.
Detailed Location:
Ecological: NESTING SUBSTRATE IS REEDS.
General: SUCCESSFUL NESTING INDICATED BY THE PRESENCE OF FLEDGED YOUNG JUST OUT OF THE NEST.
Owner/Manager: UNKNOWN

Occurrence No.	332	Map Index:	39583	EO Index:	32179	Element Last Seen:	198X-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	198X-XX-XX	Record Last Updated:	1998-09-22
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Torrance (3311873)
County Summary: Los Angeles

Lat/Long:	33.82705 / -118.34240	Accuracy:	non-specific area
UTM:	Zone-11 N3743790 E375777	Elevation (ft):	75
PLSS:	T04S, R14W, Sec. 15, SW (S)	Acres:	56.2

Location: MADRONA MARSH, AT MADRONA MARSH NATURE CENTER, TORRANCE.
Detailed Location:
Ecological: HABITAT CONSISTS OF A VERNAL POOL AREA VEGETATED BY TULE.
General: 75-100 INDIVIDUALS OBSERVED NESTING IN 1981 OR 1982 (BY COLLINS).
Owner/Manager: CITY OF TORRANCE-MADRONA MARSH



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	774	Map Index:	99707	EO Index:	101254	Element Last Seen:	1940-05-10
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:			1940-05-10
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2016-04-21
Quad Summary:	Inglewood (3311883)						
County Summary:	Los Angeles						
Lat/Long:	33.9033 / -118.324	Accuracy:	1 mile				
UTM:	Zone-11 N3752223 E377589	Elevation (ft):	43				
PLSS:	T03S, R14W, Sec. 14 (S)	Acres:	1987.0				
Location:	ABOUT 3 MI SW OF I-105 & I-110 INTERCHANGE, 3.1 MI SE OF I-105 & I-405 INTERCHANGE, NW OF GARDENA.						
Detailed Location:	LOCATION DESCRIBED AS "DOMINGUEZ LAGOON, NORTHEAST OF GARDENA." MAPPED ACCORDING TO LAGOON LOCATION ON HISTORIC USGS MAPS FOR "TORRENCE" (1934) AND "INGLEWOOD" (1943). DOMINGUEZ LAGOON LOCATED TO THE NW OF GARDENA ACCORDING TO MAPS.						
Ecological:	THE AREA HAS BEEN COMPLETELY DEVELOPED SINCE THE TIME OF OBSERVATION. CANAL STILL PRESENT BUT NO SUITABLE VEGETATION VISIBLE IN AERIAL PHOTOGRAPHS. HABITAT IN 1940 DESCRIBED AS TALL TULE MARSH AND GRAIN FIELD.						
General:	4-200 BIRDS OBSERVED ON 13 APR & 10 MAY 1940 (COGSWELL PERS. COMM.). BIRDS OBSERVED FLYING BETWEEN THE MARSH AND GRAIN FIELDS. COLONY PRESUMED EXTIRPATED BY BEEDY (1991).						
Owner/Manager:	UNKNOWN						

<i>Siphateles bicolor mohavensis</i>	Element Code: AFCJB1303H						
Mohave tui chub							
Listing Status:	Federal:	Endangered	CNDDDB Element Ranks:	Global:	G4T1		
	State:	Endangered		State:	S1		
	Other:	AFS_EN-Endangered, CDFW_FP-Fully Protected					
Habitat:	General:	ENDEMIC TO THE MOJAVE RIVER BASIN, ADAPTED TO ALKALINE, MINERALIZED WATERS.					
	Micro:	NEEDS DEEP POOLS, PONDS, OR SLOUGH-LIKE AREAS. NEEDS VEGETATION FOR SPAWNING.					

Occurrence No.	5	Map Index:	01666	EO Index:	28635	Element Last Seen:	1976-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:			1976-XX-XX
Occ. Type:	Transplant Outside of Native Hab./Range	Trend:	Unknown	Record Last Updated:			1998-10-19
Quad Summary:	Torrance (3311873)						
County Summary:	Los Angeles						
Lat/Long:	33.78311 / -118.34565	Accuracy:	1/5 mile				
UTM:	Zone-11 N3738921 E375412	Elevation (ft):	720				
PLSS:	T04S, R14W, Sec. 33 (S)	Acres:	0.0				
Location:	SOUTH COAST BOTANIC GARDEN REFUGIUM, PALOS VERDES.						
Detailed Location:	EXPERIMENTAL TRANSPLANT OUTSIDE NATIVE RANGE. BOTANIC GARDEN IS LOCATED AT 26300 CRENSHAW BLVD, PALOS VERDES PENINSULA, CA.						
Ecological:	THE BOTANIC GARDEN SITE WAS AN OPEN PIT MINE FOR DIATOMACEOUS EARTH FROM 1929 - 1956. IT WAS A LANDFILL FROM 1957 TO 1965. THE GARDENS INCLUDE A 2 ACRE MAN-MADE LAKE AND STREAM.						
General:	EXPERIMENTAL TRANSPLANT OUTSIDE NATIVE RANGE. 147 PLANTED IN JAN 1970, SPAWNING HAD OCCURRED BY JULY 3, 1970. TEMPORARILY SUCCESSFUL BUT POPULATION EXTINCT BY 1976.						
Owner/Manager:	LAX COUNTY						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Sorex ornatus salicornicus

Element Code: AMABA01104

southern California saltmarsh shrew

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T1?
	State: None		State: S1
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General: COASTAL MARSHES IN LOS ANGELES, ORANGE AND VENTURA COUNTIES.		
	Micro: REQUIRES DENSE VEGETATION AND WOODY DEBRIS FOR COVER.		

Occurrence No.	1	Map Index:	85090	EO Index:	59229	Element Last Seen:	1991-02-28
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		2009-06-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-10	

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.96964 / -118.43652	Accuracy:	non-specific area
UTM:	Zone-11 N3759720 E367287	Elevation (ft):	5
PLSS:	T02S, R15W, Sec. 27 (S)	Acres:	609.0

Location: BALLONA WETLANDS ECOLOGICAL RESERVE, NEAR PLAYA DEL REY, LOS ANGELES.

Detailed Location: COLLECTED AT: 1-BALLONA CR, 1/4 MI SW LINCOLN BLVD & JEFFERSON BLVD (BC). 2-DEL REY MARSH (DRM). 3-PLAYA DEL REY MARSH; E MAIN SLOUGH, BETWEEN BALLONA CR & CULVER BLVD (EPM). 4-PLAYA DEL REY, 1 MI N (NP). 5-PLAYA DEL REY SALT MARSH (PM).

Ecological:

General: BC: 1 FEM 28 FEB 1991 (LACM 91021). DRM: 1 UNK 15 MAY 1929 (LACM 1195). EPM: 1 FEM 24 NOV 1968 (LACM 67382). NP: 1 UNK 17 JUN 1929 (LACM 1215), 1 MALE 13 MAR 1932 (MVZ 74679). PM: 1 MALE 1 NOV 1941 (LACM 20454). 0 IN 2005 & 2009 SURVEYS.

Owner/Manager: DFG-BALLONA WETLANDS ER



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Lasionycteris noctivagans</i>		Element Code: AMACC02010	
silver-haired bat			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3G4
	State: None		State: S3S4
	Other: IUCN_LC-Least Concern, WBWG_M-Medium Priority		
Habitat:	General: PRIMARILY A COASTAL AND MONTANE FOREST DWELLER, FEEDING OVER STREAMS, PONDS & OPEN BRUSHY AREAS.		
	Micro: ROOSTS IN HOLLOW TREES, BENEATH EXFOLIATING BARK, ABANDONED WOODPECKER HOLES, AND RARELY UNDER ROCKS. NEEDS DRINKING WATER.		

Occurrence No.	50	Map Index:	68566	EO Index:	68930	Element Last Seen:	1986-11-18
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1986-11-18	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2007-03-20	
Quad Summary:	Long Beach (3311872)						
County Summary:	Los Angeles						
Lat/Long:	33.79315 / -118.20057		Accuracy:	80 meters			
UTM:	Zone-11 N3739869 E388858		Elevation (ft):	10			
PLSS:	T04S, R13W, Sec. 26, SE (S)		Acres:	0.0			
Location:	LONG BEACH, JUST SOUTH OF INTERSECTION OF 20TH ST AND MAINE AVE.						
Detailed Location:	MAPPED ACCORDING TO LOCALITY DESCRIPTION AND LAT/LONG COORDINATES PROVIDED BY MANIS.						
Ecological:							
General:	1 MALE SPECIMEN (MVZ #181854) COLLECTED AT "LONG BEACH, 1995 MAINE" BY DENNY G. CONSTANTINE ON 18 NOV 1986.						
Owner/Manager:	UNKNOWN						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Eumops perotis californicus</i>		Element Code: AMACD02011	
western mastiff bat			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4G5T4
	State: None		State: S3S4
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, WBWG_H-High Priority		
Habitat:	General: MANY OPEN, SEMI-ARID TO ARID HABITATS, INCLUDING CONIFER & DECIDUOUS WOODLANDS, COASTAL SCRUB, GRASSLANDS, CHAPARRAL, ETC.		
	Micro: ROOSTS IN CREVICES IN CLIFF FACES, HIGH BUILDINGS, TREES AND TUNNELS.		

Occurrence No.	65	Map Index: 66308	EO Index: 66394	Element Last Seen: 1987-04-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1987-04-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-09-21

Quad Summary:	Inglewood (3311883)
County Summary:	Los Angeles

Lat/Long:	33.93103 / -118.30905	Accuracy:	1 mile
UTM:	Zone-11 N3755281 E379010	Elevation (ft):	200
PLSS:	T03S, R14W, Sec. 01 (S)	Acres:	0.0

Location: SW LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED ACCORDING TO LAT/LONG COORDINATES GIVEN IN MANIS, WITH UNCERTAINTY OF 3218.688 M.

Ecological:

General: 1 MALE AND 1 FEMALE SPECIMEN COLLECTED BY WILLIAM E. RAINEY ON 1 JAN AND 1 APR 1987, MVZ #182350 AND #182475, RESPECTIVELY.

Owner/Manager: UNKNOWN

Occurrence No.	168	Map Index: 23783	EO Index: 66526	Element Last Seen: 1929-07-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1929-07-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-11-01

Quad Summary:	Inglewood (3311883)
County Summary:	Los Angeles

Lat/Long:	33.88942 / -118.31857	Accuracy:	1 mile
UTM:	Zone-11 N3750677 E378070	Elevation (ft):	50
PLSS:	T03S, R14W (S)	Acres:	0.0

Location: GARDENA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY PIERSON AND RAINEY.

Ecological:

General: SPECIMEN COLLECTED 22 JUL 1929 AND DEPOSITED AT SBMNH.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Nyctinomops femorosaccus</i>		Element Code: AMACD04010	
pocketed free-tailed bat			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S3
	Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_M-Medium Priority		
Habitat:	General: VARIETY OF ARID AREAS IN SOUTHERN CALIFORNIA; PINE-JUNIPER WOODLANDS, DESERT SCRUB, PALM OASIS, DESERT WASH, DESERT RIPARIAN, ETC.		
	Micro: ROCKY AREAS WITH HIGH CLIFFS.		

Occurrence No.	15	Map Index: 68461	EO Index: 68716	Element Last Seen: 1985-10-18
Occ. Rank:	Unknown	Presence: Presumed Extant	Site Last Seen: 1985-10-18	
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Record Last Updated: 2007-03-14	
Quad Summary:	Torrance (3311873)			
County Summary:	Los Angeles			
Lat/Long:	33.79001 / -118.29745		Accuracy: 4/5 mile	
UTM:	Zone-11 N3739630 E379884		Elevation (ft): 50	
PLSS:	T04S, R14W, Sec. 36 (S)		Acres: 0.0	
Location:	HARBOR CITY.			
Detailed Location:	LOCATION GIVEN ONLY AS 'HARBOR'. MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY MANIS WITH UNCERTAINTY OF 0.75 MI.			
Ecological:				
General:	1 FEMALE SPECIMEN (MVZ #181960) COLLECTED AT "HARBOR" BY DENNY G. CONSTANTINE ON 18 OCT 1985.			
Owner/Manager:	UNKNOWN			

Occurrence No.	16	Map Index: 28742	EO Index: 68717	Element Last Seen: 1994-10-18
Occ. Rank:	Unknown	Presence: Presumed Extant	Site Last Seen: 1994-10-18	
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Record Last Updated: 2007-03-14	
Quad Summary:	Inglewood (3311883)			
County Summary:	Los Angeles			
Lat/Long:	33.95930 / -118.35104		Accuracy: 1 mile	
UTM:	Zone-11 N3758465 E375170		Elevation (ft): 100	
PLSS:	T02S, R14W (S)		Acres: 0.0	
Location:	INGLEWOOD.			
Detailed Location:				
Ecological:				
General:	1 MALE SPECIMEN (LACM #94036) COLLECTED AT "INGLEWOOD" BY DENNY G. CONSTANTINE ON 18 OCT 1994.			
Owner/Manager:	UNKNOWN			



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Nyctinomops macrotis</i>		Element Code: AMACD04020	
big free-tailed bat			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: None		State: S3
	Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_MH-Medium-High Priority		
Habitat:	General: LOW-LYING ARID AREAS IN SOUTHERN CALIFORNIA.		
	Micro: NEED HIGH CLIFFS OR ROCKY OUTCROPS FOR ROOSTING SITES. FEEDS PRINCIPALLY ON LARGE MOTHS.		

Occurrence No.	5	Map Index:	27997	EO Index:	59564	Element Last Seen:	1983-10-07
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1983-10-07	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-01-21	

Quad Summary: Long Beach (3311872)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.77120 / -118.18868	Accuracy:	1 mile
UTM:	Zone-11 N3737422 E389931	Elevation (ft):	20
PLSS:	T05S, R13W, Sec. 01 (S)	Acres:	0.0

Location: LONG BEACH.
Detailed Location: EXACT LOCATION NOT KNOWN; MAPPED IN GENERAL AREA OF LONG BEACH. LOCATION ONLY GIVEN AS "LONG BEACH." COORDINATES PROVIDED BY MANIS FALL ON NORTHEAST SIDE OF CIRCLE WITH AN UNCERTAINTY OF 3218 METERS (ABOUT 2 MILES).
Ecological:
General: ONE FEMALE SPECIMEN COLLECTED 7 OCT 1983 BY D. CONSTANTINE AT "LONG BEACH." DEPOSITED AT MVZ #181983.
Owner/Manager: UNKNOWN

<i>Perognathus longimembris pacificus</i>		Element Code: AMAFD01042	
Pacific pocket mouse			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G5T1
	State: None		State: S1
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General: INHABITS THE NARROW COASTAL PLAINS FROM THE MEXICAN BORDER NORTH TO EL SEGUNDO, LOS ANGELES COUNTY.		
	Micro: SEEMS TO PREFER SOILS OF FINE ALLUVIAL SANDS NEAR THE OCEAN, BUT MUCH REMAINS TO BE LEARNED.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: 39854	EO Index: 34856	Element Last Seen:	1931-09-05
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1931-09-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2003-04-10

Quad Summary: Torrance (3311873), Redondo Beach (3311874)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.82667 / -118.38139	Accuracy:	3/5 mile
UTM:	Zone-11 N3743796 E372168	Elevation (ft):	100
PLSS:	T04S, R14W, Sec. 17 (S)	Acres:	0.0

Location: CLIFTON, EAST OF REDONDO STATE BEACH.

Detailed Location:

Ecological:

General: HISTORIC SITE. 3 SBMNH SPECIMENS AND 1 MVZ SPECIMEN (MALE, #47325), ALL COLLECTED IN SEP 1931.

Owner/Manager: UNKNOWN

Occurrence No.	2	Map Index: 39858	EO Index: 34860	Element Last Seen:	1938-06-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1938-06-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2003-04-10

Quad Summary: Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.93139 / -118.42565	Accuracy:	non-specific area
UTM:	Zone-11 N3755463 E368233	Elevation (ft):	100
PLSS:	T03S, R15W, Sec. 11 (S)	Acres:	5595.2

Location: MARINA DEL REY/EL SEGUNDO AREA.

Detailed Location: COLLECTION LOCALITIES INCLUDEL: DEL REY, PLAYA DEL REY, PALISADES DEL REY, DEL REY HILLS NEAR LOYOLA UNIVERSITY, HYPERION, & 1 MILE NORTH & 1/2 MILE NW OF EL SEGUNDO.

Ecological:

General: HISTORIC SITE. 118 SPECIMENS COLLECTED BETWEEN NOV 1918 AND JUN 1938. SPECIMENS ARE DEPOSITED IN SBMNH, LACM, SDMNH, MVZ, AND UA.

Owner/Manager: UNKNOWN

Occurrence No.	3	Map Index: 39864	EO Index: 34866	Element Last Seen:	1865-10-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1865-10-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2003-04-10

Quad Summary: Long Beach (3311872), Torrance (3311873)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.79001 / -118.24785	Accuracy:	1 mile
UTM:	Zone-11 N3739572 E384477	Elevation (ft):	30
PLSS:	T04S, R13W, Sec. 33 (S)	Acres:	0.0

Location: WILMINGTON, LOS ANGELES.

Detailed Location:

Ecological:

General: HISTORIC SITE. 3 MVZ SPECIMENS (#5633-35) COLLECTED IN OCT 1865 BY J. G. COOPER.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Neotoma lepida intermedia</i>		Element Code: AMAFF08041	
San Diego desert woodrat			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T3T4
	State: None		State: S3S4
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General: COASTAL SCRUB OF SOUTHERN CALIFORNIA FROM SAN DIEGO COUNTY TO SAN LUIS OBISPO COUNTY.		
	Micro: MODERATE TO DENSE CANOPIES PREFERRED. THEY ARE PARTICULARLY ABUNDANT IN ROCK OUTCROPS, ROCKY CLIFFS, AND SLOPES.		

Occurrence No.	11	Map Index:	33547	EO Index:	29698	Element Last Seen:	1991-08-26
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:		1991-08-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1996-11-05	

Quad Summary:	San Pedro (3311863)
County Summary:	Los Angeles, Pacific Ocean

Lat/Long:	33.73142 / -118.35211	Accuracy:	non-specific area
UTM:	Zone-11 N3733197 E374739	Elevation (ft):	200
PLSS:	T05S, R14W (S)	Acres:	460.0

Location:	PALOS VERDES PENINSULA, SOUTH OF PALOS VERDES DRIVE, BETWEEN PALOS VERDES PENINSULAR PARK AND PORTUGUESE POINT.
Detailed Location:	WOODRATS TRAPPED IN THE VICINITY OF PRICKLY PEAR CLUMPS.
Ecological:	SITE IS MADE UP OF PRIMARILY DISTURBED RUDERAL VEGETATION, DOMINATED BY FENNEL AND BRASSICA. THERE ARE CLUMPS OF CSS AND COASTAL BLUFF SCRUB, WHERE ARTEMISIA CALIFORNICA AND PRICKLY PEAR OCCUR.
General:	19 ADULTS TRAPPED BETWEEN 23-26 AUGUST 1991.
Owner/Manager:	UNKNOWN

<i>Microtus californicus stephensi</i>		Element Code: AMAFF11035	
south coast marsh vole			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T2T3
	State: None		State: S1S2
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General: TIDAL MARSHES IN LOS ANGELES, ORANGE AND SOUTHERN VENTURA COUNTIES.		
	Micro: <input type="checkbox"/>		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: 58944	EO Index: 58980	Element Last Seen: 1977-03-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1977-03-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-12-22

Quad Summary: Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.99722 / -118.36350	Accuracy:	1/5 mile
UTM:	Zone-11 N3762685 E374074	Elevation (ft):	300
PLSS:	T02S, R14W, Sec. 17 (S)	Acres:	0.0

Location: BALDWIN HILLS, ABOUT 0.1 MILE SOUTHWEST OF INTERSECTION BETWEEN STOCKER STREET AND FAIRFAX AVENUE.

Detailed Location: 1977 SPECIMENS COLLECTED AT THIS SPECIFIC LOCATION. 1957 SPECIMENS COLLECTED FROM THE GENERAL VICINITY OF BALDWIN HILLS.

Ecological:

General: 2 FEMALE SPECIMENS COLLECTED 10 MAR 1977 AT "BALDWIN HILLS, 200 YDS SE OF STOCKER ST & FAIRFAX AVE." LACM #87761 & 87786. ALSO FROM THE GENERAL LOCALITY OF BALDWIN HILLS: 4 FEMALES & 2 MALES COLLECTED 9 & 14 APR 1957. LACM #10336-10341.

Owner/Manager: UNKNOWN

Occurrence No.	2	Map Index: 01722	EO Index: 58981	Element Last Seen: 1957-04-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1957-04-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-12-22

Quad Summary: Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	33.99055 / -118.38285	Accuracy:	1 mile
UTM:	Zone-11 N3761970 E372277	Elevation (ft):	200
PLSS:	T02S, R14W, Sec. 18 (S)	Acres:	0.0

Location: CULVER CITY.

Detailed Location: EXACT LOCATION NOT KNOWN, MAPPED IN THE GENERAL VICINITY OF CULVER CITY & BALDWIN HILLS.

Ecological:

General: 1 M & 8 U SPECIMENS COLLECTED 14, 15 & 26 JUL 1927 BY G. ASHCRAFT AT "CULVER CITY." LACM #21357-21363 & 21365 & FMNH #34420. ALSO FROM "BALDWIN HILLS" 3 F & 2 M COLLECTED 9 & 14 APR 1957 BY C. MCLAUGHLIN. LACM #10336-10341.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	3	Map Index:	85090	EO Index:	58983	Element Last Seen:	2011-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2011-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2018-10-12	
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.96964 / -118.43652		Accuracy:	non-specific area			
UTM:	Zone-11 N3759720 E367287		Elevation (ft):	5			
PLSS:	T02S, R15W, Sec. 27 (S)		Acres:	609.0			
Location:	BALLONA WETLANDS ECOLOGICAL RESERVE, NEAR PLAYA DEL REY, LOS ANGELES.						
Detailed Location:	MAPPED AT BALLONA WETLANDS ER. SPECIMENS ALSO COLLECTED AT: DEL REY (DR), DEL REY MARSH (DRM), BALLONA WETLANDS (BW), PLAYA DEL REY (PDR), PLAYA DEL REY SALT MARSH (PDRS) & PLAYA DEL REY MARSH (PDRM). 2009: SW OF BALLONA CR & LINCOLN BLVD.						
Ecological:	2009 COLLECTIONS IN HIGH MARSH AND SEASONAL WETLAND.						
General:	1925: 6 COLLECTED. 1929-30: 3-10 COLL. 1932: 11 COLL. 1933: 3 COLL. 1934: 2 COLL. 1935: 10 COLL. 1936: 1 COLL. 1941: 2 COLL. 1955: 2 COLL. 1957: 1 COLL. 1968: 2 COLL. 1988: 2 COLL. 1991: 1 COLL. PRESENT IN 1981, 1996, 2000-2001, 2009-2011.						
Owner/Manager:	DFG-BALLONA WETLANDS ER						

<i>Taxidea taxus</i>	Element Code: AMAJF04010		
American badger			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S3
	Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern		
Habitat:	General: MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.		
	Micro: NEEDS SUFFICIENT FOOD, FRIABLE SOILS AND OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.		

Occurrence No.	291	Map Index:	51258	EO Index:	57504	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		XXXX-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-01-05	
Quad Summary:	South Gate (3311882), Inglewood (3311883), Los Angeles (3411812), Hollywood (3411813), Pasadena (3411822), Burbank (3411823)						
County Summary:	Los Angeles						
Lat/Long:	34.05366 / -118.24549		Accuracy:	5 miles			
UTM:	Zone-11 N3768805 E385050		Elevation (ft):	280			
PLSS:	T01S, R13W, Sec. 28 (S)		Acres:	0.0			
Location:	LOS ANGELES.						
Detailed Location:	NO OTHER LOCATION INFORMATION GIVEN.						
Ecological:							
General:	1 COLLECTED, LACM.						
Owner/Manager:	UNKNOWN						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Emys marmorata</i>		Element Code: ARAAD02030	
western pond turtle			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3G4
	State: None		State: S3
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive		
Habitat:	General: A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS AND IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.		
	Micro: NEEDS BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.		

Occurrence No.	913	Map Index:	01492	EO Index:	28190	Element Last Seen:	1941-10-29
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1987-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-14	

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.96411 / -118.44601	Accuracy:	non-specific area
UTM:	Zone-11 N3759118 E366401	Elevation (ft):	5
PLSS:	T02S, R15W, Sec. 27, SW (S)	Acres:	108.0

Location: BALLONA CREEK, PLAYA DEL REY.
Detailed Location: TAKEN IN SALT MARSH.
Ecological:
General: MUSEUM COLLECTION, LACM #7998. BRATTSTROM (1990) CONSIDERS THIS POP EXTIRPATED. NOT DETECTED IN 1981, 1991, AND 1996 SURVEY EFFORTS (JOH11R0001).
Owner/Manager: DFG-BALLONA WETLANDS ER

<i>Anniella stebbinsi</i>		Element Code: ARACC01060	
Southern California legless lizard			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3
	State: None		State: S3
	Other: CDFW_SSC-Species of Special Concern, USFS_S-Sensitive		
Habitat:	General: GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.		
	Micro: VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: A8262	EO Index: 110041	Element Last Seen:	2010-04-20
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-04-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-01-29
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.94184 / -118.43758		Accuracy:	non-specific area	
UTM:	Zone-11 N3756638 E367147		Elevation (ft):	145	
PLSS:	T03S, R15W, Sec. 3 (S)		Acres:	311.0	
Location:	DUNES BOUNDED BY VISTA DEL MAR, NAPOLEON ST, PERSHING DR, & IMPERIAL HWY, W OF LAX, LOS ANGELES/EL SEGUNDO DUNES ESHA.				
Detailed Location:	HOLOTYPE LOCALITY FOR NEWLY DESCRIBED SPECIES, A. STEBBINSI. MAPPED TO THE ECOLOGICALLY SENSITIVE HABITAT AREA WHICH IS FENCED AND HAS RESTRICTED ACCESS.				
Ecological:	SOUTHERN DUNE SCRUB. DUNE COMPLEX WAS ALMOST ENTIRELY DEVELOPED AS ESTATES FROM THE 1940S-1960S. EMINENT DOMAIN WAS USED BY CITY OF LA FOR LAX EXPANSION; HOUSES WERE REMOVED AND THE DUNES BECAME A RESERVE FOR THE EL SEGUNDO BLUE BUTTERFLY.				
General:	MOST ABUNDANT REPTILE IN 1930S SURVEYS. COLLECTED IN 1918, 1932, 1941, 1942, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1954, 1955, 1956, 1957, 1958, 1963, 1964, 1970, 1971, 1973, 1985, AND 2010 (HOLOTYPE).				
Owner/Manager:	CITY OF LOS ANGELES				
Occurrence No.	16	Map Index: 79246	EO Index: 80225	Element Last Seen:	2009-02-22
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2009-02-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-06-30
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.80750 / -118.31861		Accuracy:	80 meters	
UTM:	Zone-11 N3741594 E377950		Elevation (ft):	95	
PLSS:	T04S, R14W, Sec. 26, N (S)		Acres:	0.0	
Location:	ABOUT 70 METERS NNW THE INTERSECTION OF 240TH STREET AND BENHILL AVE, TORRANCE.				
Detailed Location:	LOCATION MAPPED TO PROVIDED COORDINATES. FORMERLY A. PULCHRA PULCHRA EO #83.				
Ecological:	HABITAT CONSISTED OF THICK DECAYING LEAVES AND MULCH. THIS SITE IS COMPLETELY SURROUNDED BY DEVELOPMENT.				
General:	TWO (4-5 INCHES LONG) OBSERVED ON 24 JAN 2009 WHILE WEEDING. ONE (3-4 INCHES LONG) OBSERVED ON 22 FEB 2009.				
Owner/Manager:	PVT				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	45	Map Index: A8265	EO Index: 110046	Element Last Seen: 2005-11-24
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 2005-11-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2018-01-29

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.95844 / -118.45092	Accuracy:	1/10 mile
UTM:	Zone-11 N3758496 E365940	Elevation (ft):	12
PLSS:	T02S, R15W, Sec. 33, NE (S)	Acres:	18.0

Location: NEAR THE INTERSECTION OF CULVER BLVD AND PACIFIC AVE ADJACENT TO DOCKWEILER BEACH, PLAYA DEL REY.

Detailed Location: COLLECTIONS FROM 1934-1955 FOR PLAYA DEL REY INCLUDED HERE; UNCLEAR IF THEY MAY HAVE BEEN COLLECTED AT EL SEGUNDO DUNES (EO #1) S OF PLAYA DEL REY. 2005 REFERRED SPECIMEN FOR NEWLY DESCRIBED A. STEBBINSI COLLECTED FROM REMNANT BEACH DUNE.

Ecological: PLAYA DEL REY WAS LESS DEVELOPED UNTIL THE 1960S & THIS AREA WAS PRIMARILY VACANT LOTS. WHERE COLLECTED IN 2005 APPEARS TO BE A SMALL DUNE AREA ON THE BEACH ADJ TO PACIFIC AVE ZONED AS COMMERCIAL VACANT LAND & OWNED BY SEAGLASS VENTURES LLC.

General: COLLECTED FROM THE VICINITY OF PLAYA DEL REY IN 1934, 1951, 1952, 1953, 1955. COLLECTED AT THIS LOCATION ON 24 NOV 2005; REFERRED SPECIMEN FOR NEWLY DESCRIBED A. STEBBINSI.

Owner/Manager: PVT

Occurrence No.	46	Map Index: A8267	EO Index: 110049	Element Last Seen: 1959-05-10
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1959-05-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2018-01-29

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.955 / -118.44747	Accuracy:	1/10 mile
UTM:	Zone-11 N3758110 E366253	Elevation (ft):	55
PLSS:	T02S, R15W, Sec. 34, SW (S)	Acres:	18.0

Location: WEST END OF MANCHESTER RD NEAR VISTA DEL MAR LANE, PLAYA DEL REY.

Detailed Location: LOCATION IS UNCERTAIN. IT'S POSSIBLE THIS WAS COLLECTED FROM THE STEEP SLOPE AT THE W END OF MANCHESTER BETWEEN VISTA DEL MAR AND VISTA DEL MAR LANE. THIS AREA WAS NOT DEVELOPED UNTIL AFTER THE 1970S, LIKELY BEING TOO STEEP.

Ecological:

General: ONE COLLECTED IN THIS AREA ON 10 MAY 1959.

Owner/Manager: PVT



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	47	Map Index: A8268	EO Index: 110050	Element Last Seen:	2016-05-14
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2016-05-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-12-19

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.96252 / -118.44982	Accuracy:	specific area
UTM:	Zone-11 N3758947 E366048	Elevation (ft):	15
PLSS:	T02S, R15W, Sec. 33, NE (S)	Acres:	5.0

Location: DUNE AREAS OF BALLONA WETLANDS, E OF VISTA DEL MAR & N OF CULVER BLVD, W END OF BALLONA WETLANDS ER, N OF PLAYA DEL REY.

Detailed Location: BEHIND APARTMENT COMPLEX ABOUT 0.25 MILES NORTH OF CULVER BLVD AT VISTA DEL MAR (NE SEC 33), AND AREA WITHIN BALLONA OUTDOOR LEARNING & DISCOVERY (BOLD) AREA (NW SEC 34), WITHIN WEST PORTION OF AREA B IN REPORTS.

Ecological: DUNE RESTORATION AREA. FOUND IN LEAF LITTER BELOW SALIX AND FOUND UNDER LOGS ON SANDY SOIL. SURROUNDING VEGETATION INCLUDED LUPINUS CHAMISSONIS, PHACELIA RHAMISSONIA, ERIOGONUM PARVIFOLIUM, AND AMBROSIA CHAMISSONIS.

General: 1 COLLECTED ON 30 JAN 1981. DETECTED DURING SURVEY EFFORTS IN 1991. INCIDENTALLY DETECTED IN 2005 & ON 10 MAR 2006. 2 FOUND DURING AREA SEARCHES IN AUG 2010. 1 FOUND UNDER A COVERBOARD IN 2011. 1 FOUND & PHOTOGRAPHED ON 14 MAY 2016.

Owner/Manager: DFG-BALLONA WETLANDS ER

Occurrence No.	48	Map Index: A8273	EO Index: 110056	Element Last Seen:	2013-02-02
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2013-02-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-01-30

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.96697 / -118.43237	Accuracy:	specific area
UTM:	Zone-11 N3759418 E367667	Elevation (ft):	7
PLSS:	T02S, R15W, Sec. 27, SE (S)	Acres:	4.0

Location: 0.5 MILE S OF HWY 1 (LINCOLN BLVD) BRIDGE OVER BALLONA CREEK, 0.3 MILES W OF BLUFF CREEK DR AT HWY 1, BALLONA WETLANDS.

Detailed Location: AREA DESCRIBED AS "DUNE WASH AREA IN AREA B BELOW CABORA ROAD BLUFFS."

Ecological: DUNE WASH HABITAT; SANDY FLAT. SURROUNDING VEGETATION INCLUDED LOTUS SP, SALIX SP, AVENA FATUA, CROTON CALIFORNICUS, GNAPHALIUM CANESCENS, HETEROOTHECA GRANDIFLORA, AND CARPOBROTUS EDULIS DETRITUS.

General: ONE WAS FOUND DURING A 5 HOUR AREA SEARCH OF THE DUNE AREA ON 21 SEP 2010, AND ONCE CONFIRMED PRESENT SURVEYING CEASED. ONE FOUND UNDER COVERBOARD AND PHOTOGRAPHED ON 2 FEB 2013.

Owner/Manager: DFG-BALLONA WETLANDS ER



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	49	Map Index: A8276	EO Index: 110057	Element Last Seen:	2013-03-02
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2013-03-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-01-30

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.96548 / -118.4263	Accuracy:	specific area
UTM:	Zone-11 N3759245 E368226	Elevation (ft):	54
PLSS:	T02S, R15W, Sec. 26, SW (S)	Acres:	4.0

Location: W SIDE OF HWY 1 (LINCOLN BLVD) ALONG THE N SIDE OF DECOMMISSIONED CABORA DR, SE CORNER OF BALLONA WETLANDS ER.

Detailed Location: SOUTHEAST BALLONA WETLANDS AREA B.

Ecological: FOUND UNDER COVER OBJECTS IN SANDY, COASTAL GRASSLAND.

General: ONE FOUND AND PHOTOGRAPHED ON 2 FEB, AND FIVE FOUND AND PHOTOGRAPHED ON 2 MAR, 2013.

Owner/Manager: DFG-BALLONA WETLANDS ER

Occurrence No.	50	Map Index: A8280	EO Index: 110063	Element Last Seen:	2004-05-23
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2004-05-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-04-20

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.92966 / -118.43512	Accuracy:	non-specific area
UTM:	Zone-11 N3755284 E367355	Elevation (ft):	24
PLSS:	T03S, R15W, Sec. 10, E (S)	Acres:	174.0

Location: VICINITY OF VISTA DEL MAR, S OF IMPERIAL HWY & N OF GRAND AVE, NEAR HYPERION SEWAGE TREATMENT PLANT, W OF EL SEGUNDO.

Detailed Location: 1940S COLLECTIONS LIKELY FROM VICINITY OF THE BEACH & DUNES NEAR THE OLD SEWAGE OUTLETS (SEE HISTORIC TOPOS) ADJ TO WHAT IS NOW THE SEWAGE TREATMENT PLANT (BUILT ~1950). MODERN COLLECTION FROM NEAR STATE BEACH ENTRANCE S OF IMPERIAL HWY.

Ecological: HISTORICALLY (1940S-1950S) THIS WAS A LARGE DUNE COMPLEX CONTINUOUS WITH EL SEGUNDO DUNES (PRESERVE) TO THE NORTH EXTENDING INLAND ABOUT 500 METERS FROM VISTA DEL MAR TO THE NEIGHBORHOODS OF EL SEGUNDO. ONLY REMNANT HABITAT LEFT.

General: TWO COLLECTED ON 4 MAR 1918. ONE COLLECTED ON 8 SEP 1945. SIX COLLECTED ON 5 MAY 1946. THREE COLLECTED ON 24 NOV 1946. THREE COLLECTED ON 25 APR 1948. ONE COLLECTED ON 23 MAY 2004.

Owner/Manager: DPR-DOCKWEILER SB, CITY OF LA



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	51	Map Index: A8281	EO Index: 110064	Element Last Seen:	1956-10-24
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	1956-10-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-01-30
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.891 / -118.40707		Accuracy:	1/5 mile	
UTM:	Zone-11 N3750961 E369889		Elevation (ft):	181	
PLSS:	T03S, R15W, Sec. 24, S (S)		Acres:	70.0	
Location:	SOUTHEAST OF ARDMORE AVE AND NW OF 13TH ST AT LAUREL AVE, MANHATTAN BEACH.				
Detailed Location:	ONE COLLECTED SPECIFICALLY FROM 19TH STREET, THOUGH HOUSES WERE CONSTRUCTED THERE BEFORE COLLECTION; MAY HAVE BEEN FOUND IN YARD OR NEARBY UNDEVELOPED HABITAT. OTHER GENERAL HISTORIC COLLECTIONS FOR MANHATTAN BEACH INCLUDED HERE.				
Ecological:	WHEREAS THE BEACH FRONT WAS DEVELOPED, THIS GENERAL AREA WITH DUNE HABITAT WAS UNDEVELOPED UNTIL 1947, AND THEN RESIDENCES WERE BUILT AROUND 1950. SIMILAR TO MODERN OCCURRENCES NEARBY, IT IS POSSIBLE TO FIND ANNIELLA IN YARDS.				
General:	KNOWN GENERALLY FROM MANHATTAN BEACH FROM COLLECTIONS IN 1934, 1936, 1957, AND 1964. ONE COLLECTED NEAR 617 19TH ST ON 24 OCT 1956.				
Owner/Manager:	PVT				
Occurrence No.	52	Map Index: A8282	EO Index: 110065	Element Last Seen:	2016-06-29
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2016-06-29
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-12-19
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.89901 / -118.41963		Accuracy:	non-specific area	
UTM:	Zone-11 N3751866 E368740		Elevation (ft):	20	
PLSS:	T03S, R15W, Sec. 23, NE (S)		Acres:	7.0	
Location:	VICINITY OF MANHATTAN COUNTY BEACH AT THE WEST END OF ROSECRANS AVE, MANHATTAN BEACH.				
Detailed Location:	UNCERTAIN, BUT AERIAL IMAGES APPEAR TO SHOW MORE APPROPRIATE, REMNANT DUNE HABITAT ALONG THE BEACH AND BIKE TRAIL SOUTH OF ROSECRANS AVE.				
Ecological:	INDIVIDUAL PHOTOGRAPHED IN 2016 SEEN ON SIDEWALK ADJACENT TO BEACH.				
General:	ONE COLLECTED ON 23 MAR 1989. ONE FOUND AND PHOTOGRAPHED MOVING FREELY ALONG THE SIDEWALK ON 29 JUN 2016.				
Owner/Manager:	LAX COUNTY				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	53	Map Index: A8283	EO Index: 110066	Element Last Seen: 1961-03-04
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen: 1961-03-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2018-01-30

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.88564 / -118.40038	Accuracy:	1/10 mile
UTM:	Zone-11 N3750359 E370500	Elevation (ft):	112
PLSS:	T03S, R15W, Sec. 25, NE (S)	Acres:	18.0

Location: VICINITY OF 10TH ST AT POINSETTIA AVE, TWO BLOCKS WEST OF SEPULVEDA BLVD (HIGHWAY 1), MANHATTAN BEACH.

Detailed Location:

Ecological: THIS AREA WAS NEARLY COMPLETELY DEVELOPED BY 1956, AND COMPLETELY DEVELOPED BY 1960. THIS COLLECTION WAS MOST LIKELY FROM REMNANT HABITAT IN SOMEONE'S YARD.

General: ONE COLLECTED ON 4 MAR 1961.

Owner/Manager: PVT

Occurrence No.	54	Map Index: A8285	EO Index: 110068	Element Last Seen: 1989-03-15
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen: 1989-03-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2018-01-30

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.87809 / -118.40616	Accuracy:	1/10 mile
UTM:	Zone-11 N3749528 E369954	Elevation (ft):	95
PLSS:	T03S, R15W, Sec. 25, S (S)	Acres:	18.0

Location: VICINITY OF 1ST STREET AT HIGHLAND AVE, 4 BLOCKS EAST OF THE BEACH, MANHATTAN BEACH.

Detailed Location:

Ecological: THIS AREA WAS WELL DEVELOPED BY THE 1940S-1950S. THIS WAS LIKELY COLLECTED FROM REMNANT HABITAT IN SOMEONE'S YARD, OR POSSIBLY FROM THE ELEMENTARY SCHOOL YARD.

General: ONE COLLECTED ON 15 MAR 1989.

Owner/Manager: PVT



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	55	Map Index: A9105	EO Index: 110941	Element Last Seen: 1965-07-02
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen: 1965-07-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2018-04-20

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.86443 / -118.39321	Accuracy:	1/5 mile
UTM:	Zone-11 N3747998 E371132	Elevation (ft):	94
PLSS:	T03S, R14W, Sec. 31, W (S)	Acres:	70.0

Location: VICINITY OF PIER AVE AND PACIFIC COAST HIGHWAY (HIGHWAY 1), HERMOSA BEACH.

Detailed Location: COLLECTED AT VACANT LOT. AREA WELL DEVELOPED IN 1960 & 1965 AERIALS. THE N SIDE OF PIER AVE JUST W OF HIGHWAY WAS RESIDENTIAL HOUSES, ONE LOT APPEARED UNDEVELOPED IN AERIALS NEAR 703 PIER AVE. HISTORIC HERMOSA BEACH SPECIMENS INCLUDED HERE.

Ecological: COLLECTED FROM A VACANT LOT. AERIAL IMAGERY FROM 1952, 1960, AND 1965 SHOWS THAT MOST OF THE AREA WAS PRIMARILY DEVELOPED AT THE TIME WITH ESSENTIALLY LITTLE TO NO OPEN SPACE HABITAT.

General: HISTORIC HERMOSA BEACH COLLECTIONS FROM 1943 AND 1965. TWO COLLECTED FROM A VACANT LOT IN THIS AREA ON ON 2 JUL 1965 (CARL GANS COLLECTION #CG 3364, #CG 3365).

Owner/Manager: UNKNOWN

Occurrence No.	56	Map Index: A9112	EO Index: 110947	Element Last Seen: 2002-08-18
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen: 2002-08-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2018-04-20

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.87306 / -118.40175	Accuracy:	1/10 mile
UTM:	Zone-11 N3748965 E370355	Elevation (ft):	72
PLSS:	T03S, R15W, Sec. 36, N (S)	Acres:	18.0

Location: VICINITY OF VALLEY PARK, END OF MORNINGSIDE DRIVE, CITY OF HERMOSA BEACH.

Detailed Location:

Ecological:

General: ONE COLLECTED ON 18 AUG 2002.

Owner/Manager: CITY OF HERMOSA BEACH



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	57	Map Index: A9113	EO Index: 110948	Element Last Seen:	1976-03-01
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	1976-03-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-04-24
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.84152 / -118.38969		Accuracy:	3/5 mile	
UTM:	Zone-11 N3745453 E371423		Elevation (ft):	61	
PLSS:	T04S, R14W, Sec. 7 (S)		Acres:	776.0	
Location:	REDONDO BEACH.				
Detailed Location:	COLLECTION SITES UNKNOWN. MAPPED TO GENERAL AREA NEAR HISTORIC POST OFFICE THAT WAS LESS DEVELOPED UNTIL ABOUT 1968. MOST SPECIFIC SITE STATED, 625 CATALINA AVE, IS UNCERTAIN IF N CATALINA OR S CATALINA; 625 N CATALINA AVE WITHIN POLYGON.				
Ecological:	ONE COLLECTED IN A SANDY AREA FROM UNDER A BOARD. GRINNELL MENTIONS IN GRI07A0001 THAT HIS COLLECTION FROM 1904 WAS "FROM THE SAND DUNES NEAR REDONDO."				
General:	COLLECTED IN 1904, 1915, 1963, AND 1976.				
Owner/Manager:	UNKNOWN				
Occurrence No.	58	Map Index: A9114	EO Index: 110949	Element Last Seen:	2001-04-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2001-04-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-04-20
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.80981 / -118.39244		Accuracy:	non-specific area	
UTM:	Zone-11 N3741940 E371120		Elevation (ft):	5	
PLSS:	T04S, R14W, Sec. 19, S (S)		Acres:	62.0	
Location:	TORRANCE COUNTY BEACH, NORTH OF THE PALOS VERDES ESTATES AND SOUTH OF REDONDO BEACH.				
Detailed Location:	MAPPED NON-SPECIFICALLY TO BEACH AREA FROM MALAGA COVE NORTH TO MIRAMAR PARK.				
Ecological:					
General:	ONE COLLECTED ON 22 APR 2001.				
Owner/Manager:	LAX COUNTY				
Occurrence No.	59	Map Index: A9115	EO Index: 110950	Element Last Seen:	1968-07-07
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	1968-07-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-04-20
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.80538 / -118.31465		Accuracy:	1/10 mile	
UTM:	Zone-11 N3741355 E378315		Elevation (ft):	89	
PLSS:	T04S, R14W, Sec. 26, NE (S)		Acres:	18.0	
Location:	VICINITY OF ESHELMAN AVENUE AT 242ND STREET, LOMITA.				
Detailed Location:					
Ecological:					
General:	CHASE COLLECTED SEVERAL SPECIMENS FROM THE VICINITY OF LOMITA IN THE MID TO LATE 1960S; SOME WERE SPECIFICALLY COLLECTED FROM 24205 ESHELMAN AVE.				
Owner/Manager:	PVT				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	60	Map Index: A9117	EO Index: 110951	Element Last Seen:	2012-12-07
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2012-12-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-04-23
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.84953 / -118.34174		Accuracy:	80 meters	
UTM:	Zone-11 N3746283 E375870		Elevation (ft):	91	
PLSS:	T04S, R14W, Sec. 3, SW (S)		Acres:	5.0	
Location:	ABOUT 0.2 MILE ENE OF PRAIRIE AVE AT DEL AMO BLVD, SE OF RAILROAD TRACKS, TORRANCE.				
Detailed Location:					
Ecological:	FOUND BY ARTIFICIAL COVER FLIPPING ON A SANDY HILL BORDERING DISTRESSED HABITAT.				
General:	ONE FOUND AND PHOTOGRAPHED WHILE DEBRIS FLIPPING ON 7 DEC 2012.				
Owner/Manager:	UNKNOWN				
Occurrence No.	61	Map Index: A9118	EO Index: 110952	Element Last Seen:	2011-05-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-05-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-04-23
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.86373 / -118.3576		Accuracy:	80 meters	
UTM:	Zone-11 N3747876 E374424		Elevation (ft):	100	
PLSS:	T03S, R14W, Sec. 33, SW (S)		Acres:	5.0	
Location:	EL NIDO PARK, SOUTH OF WEST 182ND STREET, TORRANCE.				
Detailed Location:					
Ecological:					
General:	ONE FOUND AND PHOTOGRAPHED WHILE DEBRIS FLIPPING ON 15 MAY 2011.				
Owner/Manager:	CITY OF TORRANCE				
Occurrence No.	63	Map Index: A9120	EO Index: 110954	Element Last Seen:	1957-10-28
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	1957-10-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-04-23
Quad Summary:	Inglewood (3311883)				
County Summary:	Los Angeles				
Lat/Long:	33.88753 / -118.33924		Accuracy:	non-specific area	
UTM:	Zone-11 N3750492 E376157		Elevation (ft):	45	
PLSS:	T03S, R14W, Sec. 22, SW (S)		Acres:	124.0	
Location:	VICINITY OF DOTY AVE AT MANHATTAN BEACH BLVD, LAWNSDALE.				
Detailed Location:	1952 & 1959 AERIAL IMAGES SHOW THAT MOST OF THE AREA WAS RECENTLY DEVELOPED AS RESIDENTIAL HOUSING. MOST LIKELY AREA OF COLLECTION WAS MARK TWAIN ELEMENTARY SCHOOL ON DOTY (VACANT LOT AT THE TIME) OR WHAT IS NOW ALONDRA PARK SOUTH OF DOTY.				
Ecological:					
General:	L. KLAUBER NOTED IN HIS 1932 PUBLICATION THAT ANNIELLA WAS KNOWN FROM GARDENA, LOS ANGELES COUNTY, WHICH IS ABOUT 1.75 MILES EAST OF HERE; UNABLE TO LOCATE FURTHER INFORMATION. ONE COLLECTED FROM THIS GENERAL LOCATION ON 28 OCT 1957.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	64	Map Index:	A9121	EO Index:	110955	Element Last Seen:	1939-05-29
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:	1939-05-29	Record Last Updated:	2018-04-23
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.95471 / -118.21127	Accuracy:	1 mile
UTM:	Zone-11 N3757795 E388079	Elevation (ft):	114
PLSS:	T02S, R13W, Sec. 35 (S)	Acres:	1987.0

Location: CITY OF SOUTH GATE, LOS ANGELES COUNTY.

Detailed Location: MAPPED NON-SPECIFICALLY CENTERED AT THE SOUTH GATE POST OFFICE.

Ecological: AERIAL IMAGES FROM 1938 SHOW PARTIAL DEVELOPMENT WITH MANY VACANT LOTS BISECTED WITH WALKING PATHS; EXTENSIVE RESIDENTIAL DEVELOPMENT BY THE MID 1950S.

General: ONE COLLECTED ON 29 MAY 1939.

Owner/Manager: UNKNOWN

Occurrence No.	70	Map Index:	A9136	EO Index:	110970	Element Last Seen:	1952-XX-XX
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:	1952-XX-XX	Record Last Updated:	2018-04-24
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Venice (3311884), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	34.0066 / -118.46009	Accuracy:	1 mile
UTM:	Zone-11 N3763849 E365169	Elevation (ft):	34
PLSS:	T02S, R15W, Sec. 9 (S)	Acres:	1987.0

Location: VENICE, LOS ANGELES COUNTY.

Detailed Location: EXACT LOCATION OF COLLECTION UNKNOWN. CUNNINGHAM MADE OTHER COLLECTIONS AROUND THIS TIME FROM PENMAR PLAYGROUND. 1947, 1952, & 1956 AERIALS INDICATE THE AREA THAT IS NOW PENMAR GOLF COURSE & REC CENTER WAS THE ONLY OPEN SPACE AT THE TIME.

Ecological: GOLF COURSE CONSTRUCTED AROUND 1962.

General: ONE COLLECTED IN 1952.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	401	Map Index: B1684	EO Index: 113598	Element Last Seen:	2018-12-22
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2018-12-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-01-07

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.79999 / -118.38199	Accuracy:	1/10 mile
UTM:	Zone-11 N3740838 E372073	Elevation (ft):	327
PLSS:	T04S, R14W, Sec. 30, E (S)	Acres:	18.0

Location: ABOUT 0.15 MILES SOUTH OF PALOS VERDES DR NORTH AT VIA ALAMEDA, LOWER MALAGA CANYON, PALOS VERDES ESTATES.

Detailed Location: APPEARS TO BE OPEN SPACE/UNDEVELOPED AREA OF PALOS VERDES GOLF CLUB.

Ecological:

General: 1 FOUND AND PHOTOGRAPHED ON 26 MAR 2016. 5 FOUND AND 1 PHOTOGRAPHED AND REPORTED ON INATURALIST, ON 22 DEC 2018 DURING BATRACHOSEPS RESEARCH.

Owner/Manager: CITY OF PALOS VERDES ESTATES

Occurrence No.	403	Map Index: B1714	EO Index: 113629	Element Last Seen:	2014-10-04
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2014-10-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-12-19

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.85568 / -118.39257	Accuracy:	1/10 mile
UTM:	Zone-11 N3747026 E371177	Elevation (ft):	65
PLSS:	T04S, R14W, Sec. 6, NW (S)	Acres:	18.0

Location: VICINITY OF ARDMORE AVE, NW OF HERONDO ST AT HWY 1, CITY OF HERMOSA BEACH.

Detailed Location:

Ecological: FOUND IN RESIDENTIAL YARD WHILE REMOVING PLANT DEBRIS ON TOP OF FINE SANDY SOIL.

General: 1 FOUND AND PHOTOGRAPHED ON 4 OCT 2014; OBSERVER NOTED THAT IT WAS THE FIRST ONE SEEN IN SEVERAL YEARS AND THAT THE NEIGHBOR FOUND SEVERAL IN THE PAST.

Owner/Manager: PVT



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	404	Map Index: B1718	EO Index: 113632	Element Last Seen:	2018-04-30
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2018-04-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-12-19
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.967 / -118.45484		Accuracy:	80 meters	
UTM:	Zone-11 N3759450 E365591		Elevation (ft):	12	
PLSS:	T02S, R15W, Sec. 28, SE (S)		Acres:	5.0	
Location:	VICINITY OF GRAND CANAL AND VIA DONTE JUST NORTH OF VIA MARINA, NORTH SIDE OF BALLONA CREEK, MARINA DEL REY.				
Detailed Location:	LIKELY FOUND AND PHOTOGRAPHED ON THE DECOMPOSED GRANITE PATH ALONG GRAND CANAL AND THE HOUSES ALONG VIA DONTE; PHOTO SEEMS TO MATCH.				
Ecological:					
General:	1 FOUND AND PHOTOGRAPHED ON 30 APR 2018.				
Owner/Manager:	UNKNOWN				

Occurrence No.	405	Map Index: B1729	EO Index: 113643	Element Last Seen:	2018-06-02
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2018-06-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-01-03
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.96918 / -118.42219		Accuracy:	1/10 mile	
UTM:	Zone-11 N3759650 E368611		Elevation (ft):	144	
PLSS:	T02S, R15W, Sec. 26 (S)		Acres:	18.0	
Location:	ABOUT 0.3 MILES EAST OF LINCOLN BLVD AT BLUFF CREEK DR, NORTH OF LEAVEY RD, LOYOLA MARYMOUNT UNIVERSITY, LOS ANGELES.				
Detailed Location:					
Ecological:					
General:	1 FOUND AND PHOTOGRAPHED ON 17 JUL 2017, AND 1 FOUND AND PHOTOGRAPHED ON 2 JUN 2018.				
Owner/Manager:	PVT				

<i>Phrynosoma blainvillii</i>		Element Code: ARACF12100
coast horned lizard		
Listing Status:	Federal: None	CNDDB Element Ranks: Global: G3G4
	State: None	State: S3S4
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	
Habitat:	General: FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	
	Micro: OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.	



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	130	Map Index: 01965	EO Index: 28078	Element Last Seen: 1952-04-15
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1952-04-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-01-23

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.90327 / -118.22273	Accuracy:	1 mile
UTM:	Zone-11 N3752103 E386952	Elevation (ft):	70
PLSS:	T03S, R13W, Sec. 15 (S)	Acres:	0.0

Location: CITY OF COMPTON.

Detailed Location: 1 RECORD FROM JUNCTION OF ROSECRANS AVE & SANTA FE AVE & 1 RECORD GIVEN ONLY AS "COMPTON".

Ecological:

General: LACM SPECIMENS #101356 COLLECTED 15 APR 1952 & #101357 COLLECTED 15 MAR 1952.

Owner/Manager: UNKNOWN

Occurrence No.	150	Map Index: 02093	EO Index: 28066	Element Last Seen: 1951-03-17
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1951-03-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-01-23

Quad Summary: Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.77173 / -118.19937	Accuracy:	1/5 mile
UTM:	Zone-11 N3737492 E388942	Elevation (ft):	25
PLSS:	T05S, R13W, Sec. 02 (S)	Acres:	0.0

Location: 4TH AND DAISY, LONG BEACH.

Detailed Location:

Ecological:

General: LACM SPECIMENS #101342-3 COLLECTED 17 MAR 1951 BY H. SAMUELSON.

Owner/Manager: UNKNOWN

Occurrence No.	152	Map Index: 02079	EO Index: 28063	Element Last Seen: XXXX-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-01-23

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.87862 / -118.20758	Accuracy:	1/5 mile
UTM:	Zone-11 N3749353 E388321	Elevation (ft):	60
PLSS:	T03S, R13W, Sec. 26 (S)	Acres:	0.0

Location: 1 MILE WEST LOS ANGELES RIVER, 200 WEST BLOCK OF EAST 68TH ST, LONG BEACH.

Detailed Location:

Ecological:

General: LACM SPECIMEN #101361; DATE OF COLLECTION NOT GIVEN.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	207	Map Index: 01796	EO Index: 28018	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Torrance (3311873), Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.86418 / -118.35641	Accuracy:	1 mile
UTM:	Zone-11 N3747924 E374535	Elevation (ft):	100
PLSS:	T03S, R14W, Sec. 33 (S)	Acres:	0.0

Location: EL NIDO, APPROX 8 MI NW OF LOS ANGELES.

Detailed Location:

Ecological:

General: USNM SPECIMENS #21965-67; COLLECTION DATE(S) UNKNOWN.

Owner/Manager: UNKNOWN

Occurrence No.	764	Map Index: 81926	EO Index: 82897	Element Last Seen:	1930-08-19
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1930-08-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-03-03

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles

Lat/Long:	33.73344 / -118.29979	Accuracy:	1 mile
UTM:	Zone-11 N3733359 E379589	Elevation (ft):	170
PLSS:	T05S, R14W, Sec. 24 (S)	Acres:	0.0

Location: VICINITY OF SAN PEDRO, LOS ANGELES COUNTY.

Detailed Location: SDNHM SPECIMEN #14184 STATED LOCALITY "SAN PEDRO." EXACT LOCATION IS UNKNOWN.

Ecological: 2009 AERIAL PHOTO SHOWS THAT THIS AREA HAS BEEN COMPLETELY CONVERTED TO RESIDENTIAL/COMMERCIAL AREA.

General: SDNHM SPECIMEN #14184 COLLECTED ON 19 AUG 1930.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Southern Dune Scrub		Element Code: CTT21330CA	
Southern Dune Scrub			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1
	State: None		State: S1.1
	Other:		
Habitat:	General: <input type="checkbox"/>		
	Micro: <input type="checkbox"/>		

Occurrence No.	1	Map Index:	01534	EO Index:	26328	Element Last Seen:	1983-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1983-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-13	

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.93401 / -118.43379	Accuracy:	1 mile
UTM:	Zone-11 N3755764 E367484	Elevation (ft):	130
PLSS:	T03S, R15W, Sec. 03 (S)	Acres:	0.0

Location: EL SEGUNDO DUNES, JUST WEST OF RUNWAYS OF LOS ANGELES INTERNATIONAL AIRPORT.
Detailed Location: REMNANT OF FORMERLY MUCH MORE EXTENSIVE DUNE SYSTEM.
Ecological: VEG DOM BY ERICAMERIA ERICOIDES, LUPINUS CHAMISSONIS, ISOMERIS ARBOREA, RHUS INTEGRIFOLIA, AND ERIOGONUM PARVIFOLIUM. MORE SPECIES INFO IN NC FILES 21330 DOCUMENT TOW85U01.
General: HABITAT FOR EL SEGUNDO BLUE BUTTERFLY. AREA MANAGED BY DEPARTMENT OF AIRPORTS. SEE WWW.DFG.CA.GOV/BIOGEO/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: CITY OF LOS ANGELES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Southern Coastal Bluff Scrub		Element Code: CTT31200CA	
Southern Coastal Bluff Scrub			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1
	State: None		State: S1.1
	Other:		
Habitat:	General: <input type="checkbox"/>		
	Micro: <input type="checkbox"/>		
Occurrence No.	23	Map Index:	17053
		EO Index:	9609
Occ. Rank:	Unknown	Presence:	Presumed Extant
		Element Last Seen:	1990-09-01
Occ. Type:	Natural/Native occurrence	Trend:	Unknown
		Site Last Seen:	1990-09-01
		Record Last Updated:	1998-07-13
Quad Summary:	San Pedro (3311863), Redondo Beach (3311874)		
County Summary:	Los Angeles, Pacific Ocean		
Lat/Long:	33.75515 / -118.41529	Accuracy:	non-specific area
UTM:	Zone-11 N3735907 E3688922	Elevation (ft):	40
PLSS:	T05S, R15W (S)	Acres:	476.7
Location:	BLUFFS OF PALOS VERDES PENINSULA FROM MALAGA COVE TO CABRILLO BEACH.		
Detailed Location:	ALONG BLUFFS AND STEEP SLOPES OF IMMEDIATE COAST; DISTRIBUTION PATCHY WITHIN BOUNDED AREA DUE TO DEVELOPMENT AND DISTURBANCE.		
Ecological:	NATIVE SPP INCLUDE RHUS INTEGRIFOLIA, ENCELIA CA, ISOCOMA MENZIESII, LYCIUM CALIFORNICA, ATRIPLEX LENTIFORMIS, ISOMERIS, OPUNTIA SPP., ERIOGONUM CINEREUM, DUDLEYA VIRENS; W/LOWER PORTIONS OF SLOPES, SUAEDA. 15-90% COVER.		
General:	CONDITION AND COMPOSITION VARIES ALONG THE PENINSULA; LARGE PORTIONS WITH INVASIVE EXOTICS. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.		
Owner/Manager:	UNKNOWN		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Southern Coastal Salt Marsh		Element Code: CTT52120CA	
Southern Coastal Salt Marsh			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2
	State: None		State: S2.1
	Other:		
Habitat:	General: <input type="checkbox"/>		
	Micro: <input type="checkbox"/>		

Occurrence No.	1	Map Index:	01492	EO Index:	16122	Element Last Seen:	1979-06-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1979-06-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:		2012-12-10	

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.96411 / -118.44601	Accuracy:	non-specific area
UTM:	Zone-11 N3759118 E366401	Elevation (ft):	80
PLSS:	T02S, R15W, Sec. 27, SW (S)	Acres:	108.0

Location: MOUTH OF BALLONA CREEK, BETWEEN MARINA DEL REY ON THE NORTH & DEL REY BLUFFS ON THE SOUTH.
Detailed Location: ABOUT 70 ACRES OF "SOMEWHAT DEGRADED BUT SALVAGEABLE" MARSH REMAIN OF 1600 AC HISTORICAL MARSH PER HENDRICKSON, 1976. BALLONA WETLANDS AREA B WEST.
Ecological: LACKS LOW AND MIDDLE MARSH FLORA. CREEK DIKED MARSH DOES NOT GET REGULAR TIDAL FLOW. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
General: RESTORATION OF PARTS (<200 AC) OF WETLANDS FEASIBLE PER DFG, 1982. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: DFG-BALLONA WETLANDS ER

Streptocephalus woottoni		Element Code: ICBRA07010	
Riverside fairy shrimp			
Listing Status:	Federal: Endangered	CNDDDB Element Ranks:	Global: G1G2
	State: None		State: S1S2
	Other: IUCN_EN-Endangered		
Habitat:	General: ENDEMIC TO WESTERN RIVERSIDE, ORANGE, AND SAN DIEGO COUNTIES IN AREAS OF TECTONIC SWALES/EARTH SLUMP BASINS IN GRASSLAND AND COASTAL SAGE SCRUB.		
	Micro: INHABIT SEASONALLY ASTATIC POOLS FILLED BY WINTER/SPRING RAINS. HATCH IN WARM WATER LATER IN THE SEASON.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	56	Map Index:	92002	EO Index:	93075	Element Last Seen:	2005-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		2005-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-05-21	
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.93900 / -118.42979		Accuracy:	1/5 mile			
UTM:	Zone-11 N3756313 E367861		Elevation (ft):	100			
PLSS:	T03S, R15W, Sec. 02, SW (S)		Acres:	0.0			
Location:	LOS ANGELES INTERNATIONAL AIRPORT, JUST SW OF WORLD WAY WEST AT PERSHING DRIVE, LOS ANGELES.						
Detailed Location:	MAPPED TO INCLUDE 5 OF 9 POOLS (EW 6, EW 9, EW 12, EW 13, EW 14) FROM WHICH S. WOOTTONI CYST-BEARING SOILS WERE COLLECTED.						
Ecological:	SITE WAS DEVELOPED AFTER SALVAGE OPERATION.						
General:	CYST-BEARING SOIL COLLECTED 18 - 28 JUL 2005 AND HOUSED IN AN APPROVED STORAGE FACILITY FOR USE IN PLANNED MITIGATION/RESTORATION. RESEARCHERS FAILED TO FIND CYSTS IN STORED SOIL FROM POOLS EW2 & EW14 IN 2009.						
Owner/Manager:	PVT						

Occurrence No.	57	Map Index:	92005	EO Index:	93077	Element Last Seen:	2005-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		2005-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-05-21	
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.93290 / -118.42440		Accuracy:	1/5 mile			
UTM:	Zone-11 N3755629 E368350		Elevation (ft):	100			
PLSS:	T03S, R15W, Sec. 02, SW (S)		Acres:	0.0			
Location:	LOS ANGELES INTERNATIONAL AIRPORT; JUST NORTH OF IMPERIAL HWY ABOUT 0.25 MILE WNW OF THE PERSHING DR INTERSECTION.						
Detailed Location:	MAPPED TO INCLUDE 2 OF 9 POOLS (EW 15 & EW 16) FROM WHICH S. WOOTTONI CYST-BEARING SOILS WERE COLLECTED.						
Ecological:	SITE WAS DEVELOPED AFTER SALVAGE OPERATION.						
General:	CYST-BEARING SOIL COLLECTED 18 - 28 JUL 2005 AND HOUSED IN AN APPROVED STORAGE FACILITY FOR USE IN PLANNED MITIGATION/RESTORATION. RESEARCHERS FAILED TO FIND CYSTS IN STORED SOIL FROM POOLS EW2 & EW14 IN 2009.						
Owner/Manager:	PVT						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	67	Map Index: 39583	EO Index: 93129	Element Last Seen:	2003-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-04-14
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.82705 / -118.34240		Accuracy:	non-specific area	
UTM:	Zone-11 N3743790 E375777		Elevation (ft):	80	
PLSS:	T04S, R14W, Sec. 15, SW (S)		Acres:	56.2	
Location:	MADRONA MARSH PRESERVE, ON THE NORTH SIDE OF WEST SEPULVEDA BLVD BETWEEN MAPLE AVE AND MADRONA AVE, TORRANCE.				
Detailed Location:					
Ecological:	44-ACRE PRESERVE PROTECTING THE LAST INTACT VERNAL POOL/VERNAL MARSH COMPLEX ON THE COASTAL PLAIN OF LOS ANGELES COUNTY.				
General:	3 CYSTS FOUND IN 2003. NO S. WOOTTONI FOUND DURING AQUATIC INVERTEBRATE SAMPLING APR-JUL 2010.				
Owner/Manager:	CITY OF TORRANCE				
Occurrence No.	68	Map Index: 92050	EO Index: 93131	Element Last Seen:	2005-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-05-21
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.95100 / -118.43320		Accuracy:	1/5 mile	
UTM:	Zone-11 N3757648 E367565		Elevation (ft):	100	
PLSS:	T02S, R15W, Sec. 34, SE (S)		Acres:	0.0	
Location:	LOS ANGELES INTERNATIONAL AIRPORT; JUST SOUTH OF WESTCHESTER PKWY AT FALMOUTH AVE, LOS ANGELES.				
Detailed Location:	MAPPED TO INCLUDE 2 OF 9 POOLS (EW 1 & EW 2) FROM WHICH S. WOOTTONI CYST-BEARING SOILS WERE COLLECTED.				
Ecological:	SITE WAS DEVELOPED AFTER SALVAGE OPERATION.				
General:	CYST-BEARING SOIL COLLECTED 18 - 28 JUL 2005 AND HOUSED IN AN APPROVED STORAGE FACILITY FOR USE IN PLANNED MITIGATION/RESTORATION. RESEARCHERS FAILED TO FIND CYSTS IN STORED SOIL FROM POOLS EW2 & EW14 IN 2009.				
Owner/Manager:	PVT				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Habroscelimorpha gabbii</i>		Element Code: IICOL02080	
western tidal-flat tiger beetle			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2G4
	State: None		State: S1
	Other:		
Habitat:	General: INHABITS ESTUARIES AND MUDFLATS ALONG THE COAST OF SOUTHERN CALIFORNIA.		
	Micro: GENERALLY FOUND ON DARK-COLORED MUD IN THE LOWER ZONE; OCCASIONALLY FOUND ON DRY SALINE FLATS OF ESTUARIES.		

Occurrence No.	6	Map Index:	39864	EO Index:	87726	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		XXXX-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-09-19	

Quad Summary: Long Beach (3311872), Torrance (3311873)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.79001 / -118.24785	Accuracy:	1 mile
UTM:	Zone-11 N3739572 E384477	Elevation (ft):	30
PLSS:	T04S, R13W, Sec. 33 (S)	Acres:	0.0

Location: WILMINGTON.
Detailed Location: LOCALITY STATED AS "WILMINGTON." EXACT LOCATION UNKNOWN.
Ecological: AIR PHOTOS SUGGEST AREA IS FULLY DEVELOPED AND SUITABLE HABITAT DOES NOT EXIST NEARBY (2012).
General: NAGANO (1980) APPEARS TO CITE FALL (1901) FOR "FORMER LOCALITIES." IN 1901, FALL WROTE "...GABBII IS INFREQUENT ON THE MUD OF SALT MARSHES AT SAN DIEGO AND WILMINGTON IN AUGUST AND SEPTEMBER, AND IS RARELY TAKEN ON THE OCEAN BEACH."
Owner/Manager: UNKNOWN

Occurrence No.	8	Map Index:	60935	EO Index:	87727	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		XXXX-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-09-19	

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.76188 / -118.16108	Accuracy:	non-specific area
UTM:	Zone-11 N3736360 E392475	Elevation (ft):	20
PLSS:	T05S, R12W, Sec. 08 (S)	Acres:	327.8

Location: LONG BEACH.
Detailed Location: LOCALITY STATED AS "NAPLES" AND "LONG BEACH." MAPPED GENERALLY TO LONG BEACH. EXACT LOCATION UNKNOWN.
Ecological: AIR PHOTOS SUGGEST NAPLES IS FULLY DEVELOPED AND SUITABLE HABITAT SUCH AS ESTUARIES AND MUDFLATS DO NOT EXIST ALONG LONG BEACH (2012).
General: NAGANO (1980) APPEARS TO CITE FALL (1901) FOR "FORMER LOCALITIES." IN 1901, FALL WROTE "...GABBII...LONG BEACH, AUGUST (DAGGETT)."
Owner/Manager: UNKNOWN

<i>Cicindela hirticollis gravida</i>		Element Code: IICOL02101	
sandy beach tiger beetle			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5T2
	State: None		State: S2
	Other:		
Habitat:	General:		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



INHABITS AREAS ADJACENT TO NON-BRACKISH WATER ALONG THE COAST OF CALIFORNIA FROM SAN FRANCISCO BAY TO NORTHERN MEXICO.

Micro: CLEAN, DRY, LIGHT-COLORED SAND IN THE UPPER ZONE. SUBTERRANEAN LARVAE PREFER MOIST SAND NOT AFFECTED BY WAVE ACTION.

Occurrence No.	11	Map Index:	36918	EO Index:	758	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1979-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-09-14	

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.82920 / -118.39055	Accuracy:	non-specific area
UTM:	Zone-11 N3744087 E371324	Elevation (ft):	12
PLSS:	T04S, R14W, Sec. 18 (S)	Acres:	27.9

Location: REDONDO BEACH.

Detailed Location:

Ecological: INHABITED CLEAN, DRY, LIGHT-COLORED SAND IN THE UPPER ZONE.

General: HISTORICAL LOCATION.

Owner/Manager: LAX COUNTY

Occurrence No.	13	Map Index:	02010	EO Index:	12878	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1979-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-09-14	

Quad Summary: San Pedro (3311863), Long Beach (3311872), Torrance (3311873)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.74851 / -118.25243	Accuracy:	1 mile
UTM:	Zone-11 N3734976 E383997	Elevation (ft):	16
PLSS:	T05S, R13W, Sec. 16 (S)	Acres:	0.0

Location: TERMINAL ISLAND.

Detailed Location:

Ecological: INHABITED CLEAN, DRY, LIGHT-COLORED SAND IN THE UPPER ZONE.

General: HISTORICAL LOCATION.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	15	Map Index: 02201	EO Index: 22672	Element Last Seen: XXXX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1979-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-09-14

Quad Summary: Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.75578 / -118.12246	Accuracy:	non-specific area
UTM:	Zone-11 N3735643 E396045	Elevation (ft):	10
PLSS:	T05S, R12W, Sec. 10 (S)	Acres:	212.1

Location: NAPLES.

Detailed Location:

Ecological: INHABITED CLEAN, DRY, LIGHT-COLORED SAND IN THE UPPER ZONE.

General: HISTORICAL LOCATION.

Owner/Manager: UNKNOWN

Occurrence No.	16	Map Index: 01488	EO Index: 17539	Element Last Seen: 1907-08-05
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1907-08-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-09-14

Quad Summary: Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.95266 / -118.44858	Accuracy:	non-specific area
UTM:	Zone-11 N3757852 E366147	Elevation (ft):	10
PLSS:	T02S, R15W, Sec. 33 (S)	Acres:	154.1

Location: PLAYA DEL REY.

Detailed Location:

Ecological: INHABITED CLEAN, DRY, LIGHT-COLORED SAND IN THE UPPER ZONE.

General: HISTORICAL LOCATION. ONE SPECIMEN DEPOSITED IN THE CALIFORNIA STATE COLLECTION OF ARTHROPODS (CDFA).

Owner/Manager: DPR-DOCKWEILER SB

Occurrence No.	33	Map Index: 60073	EO Index: 60109	Element Last Seen: 1945-08-15
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1945-08-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2005-02-17

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.75431 / -118.12182	Accuracy:	3/5 mile
UTM:	Zone-11 N3735480 E396101	Elevation (ft):	10
PLSS:	T05S, R12W, Sec. 10 (S)	Acres:	0.0

Location: ALAMITOS BAY.

Detailed Location:

Ecological:

General: HISTORICAL RECORD.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	35	Map Index:	60079	EO Index:	60115	Element Last Seen:	1937-03-07
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1937-03-07	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-02-17	

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long: 33.92414 / -118.43289

Accuracy: non-specific area

UTM: Zone-11 N3754669 E367552

Elevation (ft): 10

PLSS: T03S, R15W, Sec. 10 (S)

Acres: 88.8

Location: EL SEGUNDO.

Detailed Location: EXACT LOCATION UNKNOWN; MAPPED ALONG DOCKWEILER STATE BEACH SINCE BEETLE PREFERENCES SANDY COASTAL HABITAT.

Ecological:

General: HISTORICAL RECORD, UNKNOWN NUMBER COLLECTED.

Owner/Manager: DPR-DOCKWEILER SB



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Cicindela latesignata latesignata</i>		Element Code: IICOL02113	
western beach tiger beetle			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2G4T1T2
	State: None		State: S1
	Other:		
Habitat:	General: MUDFLATS AND BEACHES IN COASTAL SOUTHERN CALIFORNIA.		
	Micro: <input type="checkbox"/>		

Occurrence No.	3	Map Index: 57921	EO Index: 60970	Element Last Seen: XXXX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-09-14

Quad Summary: San Pedro (3311863)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.71045 / -118.30057	Accuracy:	specific area
UTM:	Zone-11 N3730811 E379485	Elevation (ft):	20
PLSS:	T05S, R14W, Sec. 25 (S)	Acres:	217.3

Location: SAN PEDRO.
Detailed Location: MAPPED ALONG BEACH AS THIS BEETLE PREFERS SANDY AREAS.
Ecological:
General: HISTORICAL LOCALITY.
Owner/Manager: UNKNOWN

Occurrence No.	5	Map Index: 60935	EO Index: 60971	Element Last Seen: XXXX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-09-14

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.76188 / -118.16108	Accuracy:	non-specific area
UTM:	Zone-11 N3736360 E392475	Elevation (ft):	20
PLSS:	T05S, R12W, Sec. 08 (S)	Acres:	327.8

Location: LONG BEACH.
Detailed Location: MAPPED ALONG BEACH AS THIS BEETLE PREFERS SANDY AREAS.
Ecological:
General: HISTORICAL LOCALITY.
Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Cicindela senilis frosti

Element Code: IICOL02121

senile tiger beetle

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G2G3T1T3

State: None

State: S1

Other:

Habitat: **General:** INHABITS MARINE SHORELINE, FROM CENTRAL CALIFORNIA COAST SOUTH TO SALT MARSHES OF SAN DIEGO. ALSO FOUND AT LAKE ELSINORE

Micro: INHABITS DARK-COLORED MUD IN THE LOWER ZONE AND DRIED SALT PANS IN THE UPPER ZONE.

Occurrence No.	4	Map Index:	01609	EO Index:	22657	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		Record Last Updated:	2012-09-14
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.89038 / -118.41588	Accuracy:	non-specific area
UTM:	Zone-11 N3750904 E369073	Elevation (ft):	10
PLSS:	T03S, R15W, Sec. 25 (S)	Acres:	66.9

Location: MANHATTAN BEACH.

Detailed Location: THE BEETLE WAS RESTRICTED TO SPECIFIC, HARD-TO-LOCATE AREAS WITHIN THE MARINE SALT MARSH.

Ecological: THE BEETLE HAS A BIMODAL FLIGHT PERIOD - IN EARLY SPRING AND LATE FALL.

General: UNCOMMONLY COLLECTED BECAUSE POPULATIONS NATURALLY EXIST AT VERY LOW LEVELS. HISTORICAL LOCATION.

Owner/Manager: LAX COUNTY-MANHATTAN BEACH



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Coelus globosus		Element Code: IICOL4A010	
globose dune beetle			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1G2
	State: None		State: S1S2
	Other: IUCN_VU-Vulnerable		
Habitat:	General: INHABITANT OF COASTAL SAND DUNE HABITAT; ERRATICALLY DISTRIBUTED FROM TEN MILE CREEK IN MENDOCINO COUNTY SOUTH TO ENSENADA, MEXICO.		
	Micro: INHABITS FOREDUNES AND SAND HUMMOCKS; IT BURROWS BENEATH THE SAND SURFACE AND IS MOST COMMON BENEATH DUNE VEGETATION.		

Occurrence No.	16	Map Index: 59331	EO Index: 60666	Element Last Seen:	1973-08-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1973-08-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-08-24

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.94612 / -118.44464	Accuracy:	non-specific area
UTM:	Zone-11 N3757121 E366501	Elevation (ft):	10
PLSS:	T03S, R15W, Sec. 03 (S)	Acres:	551.7

Location: EL SEGUNDO DUNES FROM BALLONA CREEK TO IMPERIAL HWY.
Detailed Location: INCLUDES LOCATIONS GIVEN AS "PLAYA DEL REY," "FOREDUNES BORDERING DOCKWEILER STATE BEACH," AND "WEST END OF LA AIRPORT (WESTCHESTER)".
Ecological: SCH81R0001: NOTED AS OCCURRING ON THE FOREDUNES BORDERING DOCKWEILER STATE BEACH; NO OTHER INFORMATION GIVEN.
General: 1 SPECIMEN COLLECTED 10 FEB 1934 & 1 COLLECTED 11 AUG 1953 DEPOSITED IN UC DAVIS BOHART MUSEUM OF ENTOMOLOGY. 1 COLLECTED 30 AUG 1973 BY ICENOGL & ID'D BY HOGUE.
Owner/Manager: CITY OF LOS ANGELES

Occurrence No.	38	Map Index: 85097	EO Index: 86141	Element Last Seen:	2001-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2001-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-12-10

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.96716 / -118.43843	Accuracy:	non-specific area
UTM:	Zone-11 N3759447 E367107	Elevation (ft):	10
PLSS:	T02S, R15W, Sec. 27 (S)	Acres:	324.0

Location: BALLONA WETLANDS, S SIDE OF BALLONA CREEK BETWEEN LINCOLN BLVD (HWY 1) & VISTA DEL MAR ROAD, PLAYA DEL REY, LOS ANGELES.
Detailed Location: BALLONA WETLANDS "AREA B." THE DUNES ARE ON THE EXTREME WEST EDGE OF "AREA B."
Ecological: FOUND IN DUNE AREAS.
General: NOT FOUND DURING AN INSECT SURVEY IN 1981. FOUND IN DUNES IN "AREA B" IN 1995 AND IN THE DUNE SYSTEM ON THE WEST EDGE OF THE WETLANDS IN 1996 & 2001.
Owner/Manager: DFG-BALLONA WETLANDS ER



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Onychobaris langei

Element Code: IICOL4W010

Lange's El Segundo Dune weevil

Listing Status: **Federal:** None

CNDDDB Element Ranks: **Global:** G1

State: None

State: S1

Other:

Habitat: **General:** KNOWN FROM EL SEGUNDO DUNES.

Micro:

Occurrence No. 1 **Map Index:** 01535 **EO Index:** 13171 **Element Last Seen:** 1938-09-28

Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1938-09-28

Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 1995-10-25

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long: 33.93791 / -118.43366 **Accuracy:** specific area

UTM: Zone-11 N3756197 E367502 **Elevation (ft):** 100

PLSS: T03S, R15W, Sec. 03 (S) **Acres:** 119.4

Location: EL SEGUNDO DUNES JUST W OF LOS ANGELES INTERNATIONAL AIRPORT.

Detailed Location: ENDEMIC; ONLY KNOWN FROM THE TYPE LOCALITY.

Ecological: POSSIBLE FOODPLANT IS AN EVENING PRIMROSE (OENOTHERA SP); SPECIMENS WERE TAKEN CLOSE TO THE ROOTS. LITTLE IS KNOWN ABOUT ITS LIFE HISTORY.

General:

Owner/Manager: CITY OF LA-LA/EL SEGUNDO DUNES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Trigonoscuta dorothea dorothea</i>		Element Code: IICOL51021	
Dorothy's El Segundo Dune weevil			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1T1
	State: None		State: S1
	Other:		
Habitat:	General: COASTAL SAND DUNES IN LOS ANGELES COUNTY.		
	Micro: <input type="checkbox"/>		

Occurrence No.	1	Map Index: 85097	EO Index: 22645	Element Last Seen:	2001-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2001-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-12-10

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.96716 / -118.43843	Accuracy:	non-specific area
UTM:	Zone-11 N3759447 E367107	Elevation (ft):	10
PLSS:	T02S, R15W, Sec. 27 (S)	Acres:	324.0

Location: BALLONA WETLANDS, S SIDE OF BALLONA CREEK BETWEEN LINCOLN BLVD (HWY 1) & VISTA DEL MAR ROAD, PLAYA DEL REY, LOS ANGELES.
Detailed Location: BALLONA WETLANDS "AREA B." THE DUNES ARE ON THE EXTREME WEST EDGE OF "AREA B."
Ecological: FOUND ONLY ON COASTAL SAND DUNES.
General: 1980: COMMON BENEATH NATIVE PLANTS ON THE DUNES. 1991: 15TH MOST COMMON INSECT COLLECTED IN PITFALL TRAPS & ONE OF THE MOST ABUNDANT WEEVILS ON THE DUNES. 1995: FOUND IN "AREA B." 1996 & 2001: FOUND IN THE DUNES.
Owner/Manager: DFG-BALLONA WETLANDS ER

Occurrence No.	2	Map Index: 59331	EO Index: 14454	Element Last Seen:	1954-03-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1954-03-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2005-03-01

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.94612 / -118.44464	Accuracy:	non-specific area
UTM:	Zone-11 N3757121 E366501	Elevation (ft):	120
PLSS:	T03S, R15W, Sec. 03 (S)	Acres:	551.7

Location: EL SEGUNDO AND PLAYA DEL REY DUNES.
Detailed Location: FOUND BENEATH NATIVE DUNE PLANTS.
Ecological: LIMITED TO COASTAL SAND DUNES.
General: TYPE LOCALITY IS EL SEGUNDO DUNES FROM EDGE OF PLAYA DEL REY TO HWY CROSSING THE DUNES. HOLOTYPE MALE, ALLOTYPE FEMALE, 253 MALE & 218 FEMALE PARATYPES. MULTIPLE COLLECTIONS MADE FROM 1936 TO 1954.
Owner/Manager: PVT-LAX AIRPORT, CITY OF LA



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Rhaphiomidas terminatus terminatus</i>		Element Code: IIDIP05022	
El Segundo flower-loving fly			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1T1
	State: None		State: S1
	Other:		
Habitat:	General: PRESUMED EXTINCT BUT RECENTLY DISCOVERED ON MALAGA DUNES, LOS ANGELES COUNTY.		
	Micro: PERCHED DUNES.		

*** SENSITIVE ***

Occurrence No.	1	Map Index: 65035	EO Index: 65118	Element Last Seen:	2001-07-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2001-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2021-02-25

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/5 mile
UTM:		Elevation (ft):	341
PLSS:		Acres:	70.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: A PERCHED DUNE FORMATION IN UPPER MALAGA CANYON, THAT IS DISJUNCT FROM THE BLOW SAND DUNE FORMATION AGAINST THE COASTAL BLUFFS EXTENDING ALONG TORRANCE BEACH TO THE NORTH OF THE MALAGA CANYON DISCHARGE.

General:

Owner/Manager:

<i>Brennania belkini</i>		Element Code: IIDIP17010	
Belkin's dune tabanid fly			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1G2
	State: None		State: S1S2
	Other: IUCN_VU-Vulnerable		
Habitat:	General: INHABITS COASTAL SAND DUNES OF SOUTHERN CALIFORNIA.		
	Micro: <input type="checkbox"/>		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: 01476	EO Index: 22617	Element Last Seen:	1980-07-25
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1980-07-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2016-07-21
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.96225 / -118.44969		Accuracy:	non-specific area	
UTM:	Zone-11 N3758917 E366059		Elevation (ft):	10	
PLSS:	T02S, R15W, Sec. 33, NE (S)		Acres:	8.4	
Location:	SAND DUNES JUST SOUTH OF BALLONA CREEK & JUST EAST OF VISTA DEL MAR ROAD, LOS ANGELES.				
Detailed Location:	WEST END OF THE BALLONA WETLANDS.				
Ecological:	ADULTS FLY FROM LATE MAY TO EARLY JULY AND BREED ONLY ON COASTAL SAND DUNES.				
General:	ONE ADULT TAKEN ON THE SAND DUNES; LARVAE COLLECTED 50 CM BELOW THE SOIL SURFACE 27 JUL 1980. NONE OBSERVED SINCE THE MID 1980'S.				
Owner/Manager:	DFG-BALLONA WETLANDS ER				
Occurrence No.	2	Map Index: 01535	EO Index: 14453	Element Last Seen:	1987-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1987-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1994-10-17
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.93791 / -118.43366		Accuracy:	specific area	
UTM:	Zone-11 N3756197 E367502		Elevation (ft):	100	
PLSS:	T03S, R15W, Sec. 03 (S)		Acres:	119.4	
Location:	EL SEGUNDO DUNES, ON THE WEST END OF LOS ANGELES INTERNATIONAL AIRPORT (LAX).				
Detailed Location:					
Ecological:					
General:	FLIES WERE TAKEN OCCASIONALLY IN 1986 AND RARELY IN 1987.				
Owner/Manager:	CITY OF LA-LA/EL SEGUNDO DUNES				
Occurrence No.	3	Map Index: 01563	EO Index: 22616	Element Last Seen:	1986-XX-XX
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	1986-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1995-10-25
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.92761 / -118.42706		Accuracy:	1/5 mile	
UTM:	Zone-11 N3755046 E368096		Elevation (ft):	80	
PLSS:	T03S, R15W, Sec. 11 (S)		Acres:	0.0	
Location:	SAND DUNES BEHIND HYPERION SEWAGE TREATMENT PLANT.				
Detailed Location:					
Ecological:					
General:	NO FLIES FOUND HERE IN 1987. DUNE SYSTEM PARTLY ON LADWP RIGHT-OF-WAY FOR POWER LINES.				
Owner/Manager:	PVT, LADWP				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.:	4	Map Index:	01609	EO Index:	22614	Element Last Seen:	1949-04-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		Record Last Updated:	1998-10-14
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.89038 / -118.41588	Accuracy:	non-specific area
UTM:	Zone-11 N3750904 E369073	Elevation (ft):	10
PLSS:	T03S, R15W, Sec. 25 (S)	Acres:	66.9

Location: MANHATTAN BEACH.

Detailed Location:

Ecological: SAND DUNE INHABITANT, FLYING FROM MAY TO MID-JUNE.

General: ONE FEMALE TAKEN AT THIS SITE.

Owner/Manager: LAX COUNTY-MANHATTAN BEACH

Bombus crotchii

Element Code: IIHYM24480

Crotch bumble bee

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3G4
	State: Candidate Endangered		State: S1S2

Other:

Habitat:	General: COASTAL CALIFORNIA EAST TO THE SIERRA-CASCADE CREST AND SOUTH INTO MEXICO.
	Micro: FOOD PLANT GENERA INCLUDE ANTIRRHINUM, PHACELIA, CLARKIA, DENDROMECON, ESCHSCHOLZIA, AND ERIOGONUM.

Occurrence No.:	162	Map Index:	01722	EO Index:	98991	Element Last Seen:	1953-05-02
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		Record Last Updated:	2015-09-29
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	33.99055 / -118.38285	Accuracy:	1 mile
UTM:	Zone-11 N3761970 E372277	Elevation (ft):	200
PLSS:	T02S, R14W, Sec. 18 (S)	Acres:	0.0

Location: BALDWIN HILLS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE VICINITY OF THE COMMUNITY OF BALDWIN HILLS, LOS ANGELES.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY IN SEPTEMBER 1952 AND ON 2 MAY 1953.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	163	Map Index: 28742	EO Index: 98992	Element Last Seen: 1917-05-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1917-05-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-09-29

Quad Summary: Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.95930 / -118.35104	Accuracy:	1 mile
UTM:	Zone-11 N3758465 E375170	Elevation (ft):	150
PLSS:	T02S, R14W (S)	Acres:	0.0

Location: INGLEWOOD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE VICINITY OF THE CITY OF INGLEWOOD.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY ON 26 MAY 1917.

Owner/Manager: UNKNOWN

Occurrence No.	164	Map Index: 85090	EO Index: 98993	Element Last Seen: 1981-06-11
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1990-09-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2020-12-15

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.96964 / -118.43652	Accuracy:	non-specific area
UTM:	Zone-11 N3759720 E367287	Elevation (ft):	10
PLSS:	T02S, R15W, Sec. 27 (S)	Acres:	609.0

Location: BALLONA WETLANDS ECOLOGICAL RESERVE, NEAR PLAYA DEL REY, LOS ANGELES.

Detailed Location: MAPPED BY CNDDDB NON-SPECIFICALLY ACROSS THE EXTENT OF BALLONA WETLANDS ECOLOGICAL RESERVE. COLLECTIONS WERE MADE IN UNIT 1 AND UNIT 2, WHICH FALLS WITHIN AREA B (SOUTH OF BALLONA CREEK).

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY ON 9 JUL 1980, 5 APR 1981, AND 11 JUN 1981. NOT FOUND DURING 1990 TERRESTRIAL ARTHROPOD SURVEY.

Owner/Manager: DFG-BALLONA WETLANDS ER

Occurrence No.	165	Map Index: 01557	EO Index: 98995	Element Last Seen: 1938-07-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1938-07-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-09-29

Quad Summary: Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.91505 / -118.42810	Accuracy:	1 mile
UTM:	Zone-11 N3753655 E367981	Elevation (ft):	10
PLSS:	T03S, R15W, Sec. 14 (S)	Acres:	0.0

Location: EL SEGUNDO DUNES BEACH.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE GENERAL VICINITY OF EL SEGUNDO BEACH AND DOCKWEILER STATE BEACH, EL SEGUNDO.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY ON 29 JUN 1938 AND 6 JUL 1938.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	166	Map Index:	97654	EO Index:	98996	Element Last Seen:	1938-07-10
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1938-07-10	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-10-14	

Quad Summary: Torrance (3311873), Redondo Beach (3311874), Inglewood (3311883), Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.87281 / -118.37015	Accuracy:	1 mile
UTM:	Zone-11 N3748899 E373276	Elevation (ft):	100
PLSS:	T03S, R14W, Sec. 32 (S)	Acres:	0.0

Location: NORTH REDONDO.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE NORTHERN PORTION OF THE CITY OF REDONDO BEACH.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY IN JUN 1938 AND ON 10 JUL 1938.

Owner/Manager: PVT

Occurrence No.	167	Map Index:	27997	EO Index:	98997	Element Last Seen:	1967-02-28
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1967-02-28	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-09-29	

Quad Summary: Long Beach (3311872)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.77120 / -118.18868	Accuracy:	1 mile
UTM:	Zone-11 N3737422 E389931	Elevation (ft):	20
PLSS:	T05S, R13W, Sec. 01 (S)	Acres:	0.0

Location: LONG BEACH.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE GENERAL VICINITY OF THE CITY OF LONG BEACH.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY ON 21 JUL 1967 AND 28 JUL 1967.

Owner/Manager: UNKNOWN

Occurrence No.	241	Map Index:	34591	EO Index:	118094	Element Last Seen:	2001-03-24
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2001-03-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2020-02-24	

Quad Summary: San Pedro (3311863), Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.74588 / -118.33602	Accuracy:	1 mile
UTM:	Zone-11 N3734781 E376250	Elevation (ft):	1200
PLSS:	T05S, R14W, Sec. 15 (S)	Acres:	0.0

Location: VICINITY OF SAN PEDRO HILL, PALOS VERDES PENINSULA, LOS ANGELES COUNTY

Detailed Location: LOCATION UNCERTAIN; DESCRIBED AS "SAN PEDRO" AND FOUND "DURING SURVEYS FOR PALOS VERDES BLUE BUTTERFLIES ON THE SOUTH SLOPES OF THE PALOS VERDE PENINSULA." MAPPED NON SPECIFICALLY TO SAN PEDRO HILL NEAR THE S SIDE OF THE PENINSULA.

Ecological:

General: ONE COLLECTED ON 13 MAY 2000. ONE QUEEN COLLECTED BY RICK RODGERS ON 24 MAR 2001. LOCATION AND DISTRIBUTION NEEDS RESEARCH AND CLARIFICATION.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	314	Map Index:	B6396	EO Index:	119453	Element Last Seen:	2017-07-15
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2017-07-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2020-11-12	

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles

Lat/Long:	33.7167 / -118.31507	Accuracy:	1/10 mile
UTM:	Zone-11 N3731521 E378150	Elevation (ft):	140
PLSS:	T05S, R14W, Sec. 26, NE (S)	Acres:	18.0

Location: WHITE POINT NATURE PRESERVE, LOS ANGELES.

Detailed Location: MAPPED TO PROVIDED COORDINATES, ACCURACY NOT KNOWN.

Ecological: OBSERVED ON ANNUAL SUNFLOWERS.

General: 1 INDIVIDUAL OBSERVED & PHOTOGRAPHED ON 11 JUN 2017. 1 FEMALE OBSERVED & PHOTOGRAPHED ON 8 JUL & 1 ON 15 JUL 2017.

Owner/Manager: CITY OF LOS ANGELES

<i>Eucosma henei</i>		Element Code: IILEM0R390
Henne's eucosman moth		
Listing Status:	Federal: None	CNDDDB Element Ranks:
	State: None	Global: G1
	Other:	State: S1
Habitat:	General: ENDEMIC TO THE EL SEGUNDO DUNES (TYPE LOCALITY), LOS ANGELES COUNTY.	
	Micro: LARVAL FOODPLANT IS PHACELIA RAMOSISSIMA VAR AUSTROLITORALIS; LARVAE CAN BE FOUND ON WOODY STEMS AND UPPER ROOT PARTS.	

Occurrence No.	1	Map Index:	01535	EO Index:	14461	Element Last Seen:	1984-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1984-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1995-12-07	

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.93791 / -118.43366	Accuracy:	specific area
UTM:	Zone-11 N3756197 E367502	Elevation (ft):	130
PLSS:	T03S, R15W, Sec. 03 (S)	Acres:	119.4

Location: EL SEGUNDO DUNES, JUST WEST OF LOS ANGELES INTERNATIONAL AIRPORT.

Detailed Location:

Ecological: ENDEMIC TO THE EL SEGUNDO DUNES. LARVAE ARE STEM AND ROOT BORERS OF PHACELIA RAMOSISSIMA.

General: THREE LARVAE COLLECTED BY ARNOLD, THEN REARED TO ADULT STAGE BY JULIAN P. DONOHUE (LACM) AND POSITIVELY IDENTIFIED; HAD NOT BEEN COLLECTED SINCE 1940.

Owner/Manager: CITY OF LA-LA/EL SEGUNDO DUNES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Eugnosta busckana</i>		Element Code: IILEM2X090	
Busck's gallmoth			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1G3
	State: None		State: SH
	Other:		
Habitat:	General: <input type="checkbox"/>		
	Micro: <input type="checkbox"/>		

Occurrence No.	4	Map Index:	01534	EO Index:	60416	Element Last Seen:	1939-01-XX
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1939-01-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-03-07	

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.93401 / -118.43379	Accuracy:	1 mile
UTM:	Zone-11 N3755764 E367484	Elevation (ft):	100
PLSS:	T03S, R15W, Sec. 03 (S)	Acres:	0.0

Location: EL SEGUNDO.
Detailed Location:
Ecological:
General: TYPE LOCALITY. HISTORICAL RECORD. HLOTYPE MALE, EMERGED 16 NOV 1938, AND ALLOTYPE FEMALE, EMERGED 29 NOV 1938. PARATYPES #15-33 EMERGED NOV 1938 TO JAN 1939.
Owner/Manager: CITY OF LOS ANGELES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Panoquina errans</i>		Element Code: IILEP84030	
wandering (=saltmarsh) skipper			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4G5
	State: None		State: S2
	Other: IUCN_NT-Near Threatened		
Habitat:	General: SOUTHERN CALIFORNIA COASTAL SALT MARSHES.		
	Micro: REQUIRES MOIST SALTGRASS FOR LARVAL DEVELOPMENT.		

Occurrence No.	1	Map Index:	85090	EO Index:	14465	Element Last Seen:	2010-07-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2010-07-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-10	

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.96964 / -118.43652	Accuracy:	non-specific area
UTM:	Zone-11 N3759720 E367287	Elevation (ft):	5
PLSS:	T02S, R15W, Sec. 27 (S)	Acres:	609.0

Location: BALLONA WETLANDS. AREA A: W OF HWY 1 & N OF BALLONA CR. B: W OF HWY 1 & S OF BALLONA CR. C: BTWN HWY 1 & MARINA FWY.
Detailed Location: 1981: LARGE POP FOUND IN SALTMARSH AREAS OF AREA "B" WEST OF JUNCTION OF CULVER & W JEFFERSON BLVD. SMALL POPS FOUND IN AREA "A" NEAR INTERSECTION OF FIJI WAY & ADMIRALTY WAY & IN AREA "B" SW OF LINCOLN & W JEFFERSON BLVDS.
Ecological: HOST PLANT IS SALTGRASS (DISTICHLIS SPICATA).
General: FOUND IN AREAS "A", "B" & "C" IN A 2.5 MONTH SURVEY IN 1996. FOUND IN AREAS "A" & "B" IN 1991, 1995 & 2001. FOUND IN WESTERN PORTION OF AREA B IN JULY 2010, BUT NOT FOUND IN JULY 2008 OR 2009.
Owner/Manager: DFG-BALLONA WETLANDS ER

<i>Euphilotes battoides allyni</i>		Element Code: IILEPG201B	
El Segundo blue butterfly			
Listing Status:	Federal: Endangered	CNDDDB Element Ranks:	Global: G5T1
	State: None		State: S1
	Other:		
Habitat:	General: RESTRICTED TO REMNANT COASTAL DUNE HABITAT IN SOUTHERN CALIFORNIA.		
	Micro: HOST PLANT IS ERIOGONUM PARVIFOLIUM; LARVAE FEED ONLY ON THE FLOWERS AND SEEDS; USED BY ADULTS AS MAJOR NECTAR SOURCE.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: 01535	EO Index: 14469	Element Last Seen:	2005-08-13
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2005-08-13
Occ. Type:	Natural/Native occurrence		Trend: Stable	Record Last Updated:	2007-09-06

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.93791 / -118.43366	Accuracy:	specific area
UTM:	Zone-11 N3756197 E367502	Elevation (ft):	140
PLSS:	T03S, R15W, Sec. 03 (S)	Acres:	119.4

Location: EL SEGUNDO DUNES, JUST WEST OF LOS ANGELES INTERNATIONAL AIRPORT.

Detailed Location: 70% OF AN ESTIMATED 756 ERIOGONUM PARVIFOLIUM PLANTS APPEAR TO BE STRESSED (1984). TWO OF THE 16 ERIOGONUM PATCHES SUPPORT 75% OF THE EL SEGUNDO BLUE POPULATION (1984). IN 1988, FOUND ON ONLY 20 ACRES, <3 ACRES WITH HIGH DENSITY.

Ecological: LARVAL FOOD PLANT IS ERIOGONUM PARVIFOLIUM. IN 1988 LAX AIRPORT BOARD AUTHORIZED A CONTINUING 3 YR PROGRAM OF HABITAT RESTORATION. HABITAT QUALITY WAS POOR DUE TO EXOTIC PLANTS STABILIZING THE SAND BUT IS NOW IMPROVING.

General: POPULATION EST: 1984: 750; 1986: 800; 1987: 1600; 1988: 2500 (1029 ADULTS OBS); 1990: 5000 FLYING. JUN-AUG 2004: TRANSECT COUNTS, 2123 ADULTS; BLOCK COUNTS (JUL), 2645 ADULTS. JUN-AUG '05: TRANSECT COUNTS, 2623; BLOCK COUNTS (JUL), 5560.

Owner/Manager: CITY OF LA-LA/EL SEGUNDO DUNES

Occurrence No.	2	Map Index: 01586	EO Index: 23047	Element Last Seen:	2005-08-18
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2005-08-18
Occ. Type:	Natural/Native occurrence		Trend: Stable	Record Last Updated:	2007-09-05

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.91611 / -118.42147	Accuracy:	1/5 mile
UTM:	Zone-11 N3753764 E368596	Elevation (ft):	150
PLSS:	T03S, R15W, Sec. 14 (S)	Acres:	0.0

Location: EL SEGUNDO DUNES-CHEVRON REFINERY BUTTERFLY PRESERVE.

Detailed Location: PRESERVE CONTAINS REMNANT DUNE HABITAT ON REFINERY PROPERTY.

Ecological: ERIOGONUM PARVIFOLIUM IS THE MAJOR FOOD PLANT AND IT IS BEING REESTABLISHED, WEEDY PLANTS REMOVED. POPULATION IS NOW REBOUNDING.

General: POPULATION HAD DECLINED DRAMATICALLY OVER THE 8 YEARS THAT ARNOLD ANALYZED IT. 1984: POP EST 420 INDIVIDUALS. 1986: POP EST 357. JUN- AUG 2004: 2,383 ADULTS OBS, 3 TRANSECTS. JUN- AUG 2005: 2,023 ADULTS, TRANSECT COUNTS.

Owner/Manager: PVT-CHEVRON



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	3	Map Index: 69867	EO Index: 70689	Element Last Seen:	1990-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1990-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-09-11
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.80342 / -118.39419		Accuracy:	1/5 mile	
UTM:	Zone-11 N3741233 E370948		Elevation (ft):	20	
PLSS:	T04S, R14W, Sec. 30, NW (S)		Acres:	0.0	
Location:	MALAGA COVE, JUST NORTH OF THE PALOS VERDES PENINSULA.				
Detailed Location:	AREA IS APPROXIMATELY 1 ACRE (1983). PRIVATE LAND ALONG THE BASE OF THE BLUFFS SUPPORT ERIOGONUM PARVIFOLIUM AND THE EL SEGUNDO BLUE BUTTERFLY.				
Ecological:	THE SITE WITH THE MOST ERIOGONUM PARVIFOLIUM WAS DAMAGED BY EROSION CONTROL DURING THE WINTER OF 1994/95.				
General:	DISCOVERED AT THIS SITE IN 1983 BY J. MORTON AND T. LEIGH. 1984: ONE DAY POPULATION COUNT OF 60; FEWER THAN 50 PLANTS WITH 30,000 FLOWERHEADS. 1990 SURVEY INDICATED THE STATUS HAD REMAINED UNCHANGED SINCE 1984.				
Owner/Manager:	UNKNOWN, PVT				

Occurrence No.	4	Map Index: 70052	EO Index: 70908	Element Last Seen:	2007-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-09-27
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.81491 / -118.39049		Accuracy:	1/10 mile	
UTM:	Zone-11 N3742503 E371308		Elevation (ft):	50	
PLSS:	T04S, R14W, Sec. 19, W (S)		Acres:	0.0	
Location:	MIRAMAR PARK, REDONDO BEACH.				
Detailed Location:					
Ecological:					
General:	BUTTERFLIES OBSERVED AT MIRAMAR PARK DURING 2007.				
Owner/Manager:	CITY OF TORRANCE				

<i>Glaucopsyche lygdamus palosverdesensis</i>			Element Code: IILEPG402A		
Palos Verdes blue butterfly					
Listing Status:	Federal:	Endangered	CNDDB Element Ranks:	Global:	G5T1
	State:	None		State:	S1
	Other:				
Habitat:	General:	RESTRICTED TO THE COOL, FOG-SHROUDED, SEAWARD SIDE OF PALOS VERDES HILLS, LOS ANGELES COUNTY.			
	Micro:	HOST PLANT IS ASTRAGALUS TRICHOPODUS VAR. LONCHUS (LOCOWEED).			



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: 01687	EO Index: 23027	Element Last Seen: 1976-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-12-22

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.75329 / -118.39749	Accuracy:	1/5 mile
UTM:	Zone-11 N3735678 E370567	Elevation (ft):	780
PLSS:	T05S, R14W, Sec. 07 (S)	Acres:	0.0

Location: ALTA VISTA WAY WEST OF HAWTHORNE BLVD; RANCHO PALOS VERDES.

Detailed Location:

Ecological: FORMERLY A LARGE, UNDISTURBED COASTAL TERRACE.

General: EXTIRPATED BY HOUSING DEVELOPMENT & ROAD CONSTRUCTION IN 1978; NO ADULTS OR LARVAL FOODPLANTS FOUND IN 1979. IN 1976, ASTRAGALUS FROM THIS LOCATION WERE SALVAGED & REPLANTED IN PORTUGUESE CYN. REINTRODUCTION WOULD REQUIRE CONTINUAL MGMT.

Owner/Manager: PVT

Occurrence No.	2	Map Index: 01696	EO Index: 23026	Element Last Seen: 1982-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-12-22

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.76637 / -118.39238	Accuracy:	80 meters
UTM:	Zone-11 N3737122 E371060	Elevation (ft):	940
PLSS:	T05S, R14W, Sec. 07 (S)	Acres:	0.0

Location: FRED HESSE PARK, WEST OF HAWTHORNE BLVD AT LOCHLEMA LANE, RANCHO PALOS VERDES.

Detailed Location: ABOUT 15 ACRES AT THE WEST END OF SITE REMAINS UNDEVELOPED AND SOME IS DESIGNATED A NATIVE PLANT/NATURE STUDY AREA BY THE CITY; REMAINDER IS DISKED ANNUALLY.

Ecological: NO ASTRAGALUS SEEN HERE 1983 THROUGH 1988.

General: DESIGNATED CRITICAL HABITAT IS 1980. RESTORATION OF NATURAL AREA POSSIBLE. THE BUTTERFLY AND ASSOCIATED LARVAL FOODPLANT EXTIRPATED BY PARK DEVELOPMENT IN 1982. MATTOON COUNTED 6 ADULTS ON 20 FOOD PLANTS ON BEST DAY IN SPRING 1982.

Owner/Manager: CITY OF RANCHO PALOS VERDES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	3	Map Index: 01665	EO Index: 23025	Element Last Seen: 1979-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2000-01-03

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.76586 / -118.40341	Accuracy:	80 meters
UTM:	Zone-11 N3737080 E370038	Elevation (ft):	400
PLSS:	T05S, R15W, Sec. 12 (S)	Acres:	0.0

Location: AGUA AMARGA CANYON, 0.4 KM UP CANYON; RANCHO PALOS VERDES/PALOS VERDES ESTATES.

Detailed Location:

Ecological: WEED MANAGEMENT NECESSARY FOR SUCCESSFUL REINTRODUCTION OF FOODPLANT. NO ASTRAGALUS SEEN HERE 1981 THROUGH 1988.

General: DESIGNATED CRITICAL HABITAT IN 1980. ONLY KNOWN COLONY OF PVBB AND ASTRAGALUS TO GO EXTINCT FROM DIRECT HUMAN ALTERATION OF HABITAT. AREA CONTINUED TO BE OPEN SPACE WITH NO DEVELOPMENT; CANYON TOO STEEP FOR DISKING.

Owner/Manager: PVT-RANCHO PALOS VERDES

Occurrence No.	4	Map Index: 01861	EO Index: 23024	Element Last Seen: 1983-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-10-21

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles

Lat/Long:	33.72993 / -118.33055	Accuracy:	non-specific area
UTM:	Zone-11 N3733006 E376734	Elevation (ft):	640
PLSS:	T05S, R14W, Sec. 22, NE (S)	Acres:	183.6

Location: SWITCHBACK AREA PALOS VERDES DR E; VISTA DEL MAR RD NEAR JCT W/ PALOS VERDES DR E; FRIENDSHIP PARK, RANCHO PALOS VERDES.

Detailed Location: 3 LOCATIONS AS ABOVE, ONE IS THE LARGEST CONTIGUOUS HABITAT, AS WELL AS DESIGNATED CRITICAL HABITAT, FOR THE BUTTERFLY.

Ecological: 39 ASTRAGALUS PLANTS OBSERVED HERE IN 1986, WHICH REPRESENTS 50% OF THE PALOS VERDES PENINSULA ASTRAGALUS POPULATION.

General: SITE NEEDS EXTENSIVE REHABILITATION & A FIRE MANAGEMENT PLAN TO MINIMIZE DAMAGE FROM DISKING. GOOD AREA FOR REINTRODUCTION IF SITE IS PROPERLY MANAGED. THE VISTA DEL MAR SITE IS CONSIDERED EXTIRPATED.

Owner/Manager: PVT, CITY OF RPV, LAX COUNTY



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	5	Map Index: 01725	EO Index: 23023	Element Last Seen:	1986-05-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1986-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-01-03

Quad Summary: Redondo Beach (3311874)
County Summary: Los Angeles

Lat/Long:	33.74695 / -118.38314	Accuracy:	1/5 mile
UTM:	Zone-11 N3734957 E371887	Elevation (ft):	400
PLSS:	T05S, R14W, Sec. 18 (S)	Acres:	0.0

Location: ALONG TRAILS WEST OF PORTUGUESE BEND RIDING CLUB; RANCHO PALOS VERDES.

Detailed Location:

Ecological: THE HOST PLANT, ASTRAGALUS, GROWS HERE, BUT PALOS VERDES BLUE HAS NOT BEEN OBSERVED SINCE THE SITE DISCOVERY IN 1982.

General: AREA RECEIVES RECREATIONAL USE AND WILL EVENTUALLY BE DEVELOPED, BUT IS CURRENTLY NOT HEAVILY IMPACTED. GOOD AREA FOR POSSIBLE REINTRODUCTION EFFORTS.

Owner/Manager: PVT-FILIORUM CORP

Occurrence No.	6	Map Index: 01753	EO Index: 23022	Element Last Seen:	1982-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-01-05

Quad Summary: Torrance (3311873), Redondo Beach (3311874)
County Summary: Los Angeles

Lat/Long:	33.75918 / -118.37369	Accuracy:	1/5 mile
UTM:	Zone-11 N3736302 E372781	Elevation (ft):	1200
PLSS:	T05S, R14W, Sec. 08 (S)	Acres:	0.0

Location: NEAR INTERSECTION OF SEACREST DRIVE, CRENSHAW BLVD AND CREST RD; RANCHO PALOS VERDES.

Detailed Location:

Ecological:

General: SITE DISCOVERED IN 1981; GRADING DESTROYED MOST OF HABITAT IN 1982-83. IN 1983, 6 ASTRAGALUS PLANTS SURVIVED IN TWO PATCHES, BUT LATER GRADING REDUCED # OF PLANTS TO ONLY TWO. NO PALOS VERDES BLUE BUTTERFLIES OBSERVED SINCE 1982.

Owner/Manager: PVT



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	8	Map Index: 01771	EO Index: 23020	Element Last Seen:	1981-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-01-05
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.75584 / -118.36563		Accuracy:	1/5 mile	
UTM:	Zone-11 N3735922 E373522		Elevation (ft):	1000	
PLSS:	T05S, R14W, Sec. 08 (S)		Acres:	0.0	
Location:	ALONG OLD CRENSHAW BLVD BTWN ALTAMIRA & PORTUGUESE CYNS, APPROX 0.5 MI N NARCISSA DR.				
Detailed Location:					
Ecological:					
General:	SITE DISCOVERED IN 1981; ALL LIFE STAGES PVBB OBSERVED. PLANT IS STILL FOUND AT THIS SITE, BUT IN MUCH REDUCED NUMBERS. SITE MAY BE WHERE PLANTS FROM THE TYPE LOCALITY WERE TRANSPLANTED IN 1976. SITE NOT YET DEVELOPED; SOME REC USE.				
Owner/Manager:	PVT-FILIORUM CORP				
Occurrence No.	9	Map Index: 01822	EO Index: 23019	Element Last Seen:	1982-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-01-05
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.73973 / -118.34757		Accuracy:	1/5 mile	
UTM:	Zone-11 N3734114 E375171		Elevation (ft):	600	
PLSS:	T05S, R14W, Sec. 16 (S)		Acres:	0.0	
Location:	CANYON NEAR FORRESTAL DR; N & W OF FORRESTAL-PVT DR INTERSECTION, E OF KLONDIKE CYN.				
Detailed Location:					
Ecological:					
General:	BOTH PALOS VERDES BLUE (EGGS, LARVAE & ADULTS) AND ASTRAGALUS OBSERVED HERE IN 1982. 3 ASTRAGALUS OBSERVED IN 1985, 8 IN 1986; 12 IN 1987; 16 IN 1988; NO PVBB OBSERVED.				
Owner/Manager:	PVT-PALOS VERDES PROPERTIES				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	10	Map Index: 01838	EO Index: 23017	Element Last Seen:	1983-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-01-04
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.73182 / -118.34123		Accuracy:	non-specific area	
UTM:	Zone-11 N3733229 E375747		Elevation (ft):	500	
PLSS:	T05S, R14W, Sec. 22 (S)		Acres:	158.6	
Location:	GULFCREST-HEROIC DR AREA; ALONG TRAIL ON HILLSIDE BEYOND END OF GULFCREST DR NEAR HEROIC DR.				
Detailed Location:	PALO VISTA DRIVE, SEA CLIFF HILLS DEVELOPMENT ON NORTH SIDE OF ROAD APPROX 1500 FT WEST OF JUNCTION WITH 25TH ST.				
Ecological:					
General:	SITE DISCOVERED IN 1983; AT THAT TIME THIS WAS LARGEST KNOWN STAND OF ASTRAGALUS (65 PLANTS). 1 OF 2 SITES WHERE PVBB WAS OBS IN 1983. ENTIRE SITE DISKED IN 1984; NO PVBB OBS SINCE, ALTHOUGH ASTRAGALUS FOUND 1985 THROUGH 1988.				
Owner/Manager:	PVT				
Occurrence No.	16	Map Index: 01823	EO Index: 23009	Element Last Seen:	1981-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1988-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-01-05
Quad Summary:	San Pedro (3311863), Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.75028 / -118.34730		Accuracy:	1/5 mile	
UTM:	Zone-11 N3735283 E375212		Elevation (ft):	1200	
PLSS:	T05S, R14W, Sec. 16 (S)		Acres:	0.0	
Location:	TOP OF SAN PEDRO HILL, BOUNDED BY CREST RD WEST; RANCHO PALOS VERDES.				
Detailed Location:					
Ecological:					
General:	PVBB AND ASTRAGALUS FOUND HERE IN 1981. PLANT OBSERVED IN 1983 BUT DESTROYED (EXCEPT FOR 5 PLANTS) BY GRADING IN APRIL 1983. 32 PLANTS IN 3 LOCATIONS FOUND IN 1985; ONLY 3 FOUND IN 1986. NO PVBB OBSERVED SINCE 1981 SIGHTING.				
Owner/Manager:	PVT-S&S CONSTRUCTION CO				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



*** SENSITIVE ***

Occurrence No.	18	Map Index:	25610	EO Index:	5484	Element Last Seen:	2001-04-27
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2001-04-27	
Occ. Type:	Natural/Native occurrence	Trend:	Fluctuating	Record Last Updated:		2007-09-28	

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:		Accuracy:	specific area
UTM:		Elevation (ft):	100
PLSS:		Acres:	114.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: HABITAT CONSISTS OF REMNANT COASTAL SAGE SCRUB; BUTTERFLIES FEED ON DEERWEED AND MILKVETCH. CALIFORNIA GNATCATCHER ALSO PRESENT.

General:

Owner/Manager:

Occurrence No.	19	Map Index:	B7047	EO Index:	65114	Element Last Seen:	2001-03-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2001-03-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2021-02-25	

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.8001 / -118.38096	Accuracy:	1/5 mile
UTM:	Zone-11 N3740849 E372168	Elevation (ft):	348
PLSS:	T04S, R14W, Sec. 29, NW (S)	Acres:	70.0

Location: MALAGA DUNES.

Detailed Location:

Ecological: A PERCHED DUNE FORMATION IN UPPER MALAGA CANYON, THAT IS DISJUNCT FROM THE BLOW SAND DUNE FORMATION AGAINST THE COASTAL BLUFFS EXTENDING ALONG TORRANCE BEACH TO THE N OF THE MALAGA CANYON DISCHARGE. SITE IS DEGRADED DUE TO EXOTIC PLANTS.

General: SPECIES DISCOVERD IN 2001 BY BRAD RICHARDS. SPECIES ALSO NOTED DURING SURVEY FOR RHAPHIOMIDAS TERMINATUS TERMINATUS. IT IS LIKELY THERE ARE FEWER THAN 100 INDIVIDUALS IN THIS POPULATION. FUTURE VIABILITY IS UNCERTAIN.

Owner/Manager: UNKNOWN

Danaus plexippus pop. 1

Element Code: IILEPP2012

monarch - California overwintering population

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4T2T3
	State: None		State: S2S3
	Other: USFS_S-Sensitive		

Habitat: **General:** WINTER ROOST SITES EXTEND ALONG THE COAST FROM NORTHERN MENDOCINO TO BAJA CALIFORNIA, MEXICO.
Micro: ROOSTS LOCATED IN WIND-PROTECTED TREE GROVES (EUCALYPTUS, MONTEREY PINE, CYPRESS), WITH NECTAR AND WATER SOURCES NEARBY.



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	218	Map Index:	17190	EO Index:	12042	Element Last Seen:	1998-11-08
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:	2000-12-07	Record Last Updated:	2015-11-17
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Long Beach (3311872)						
County Summary:	Los Angeles						
Lat/Long:	33.83102 / -118.13229		Accuracy:	80 meters			
UTM:	Zone-11 N3743996 E395225		Elevation (ft):	38			
PLSS:	T04S, R12W, Sec. 15, NW (S)		Acres:	0.0			
Location:	HEARTWELL PARK, JUST SE OF THE INTERSECTION OF CARSON STREET AND CLARK AVENUE, LONG BEACH.						
Detailed Location:	XERCES SITE #2875. LOCATED JUST SOUTH OF THE RESTROOMS IN HEARTWELL PARK.						
Ecological:	ROOST TREES CONSIST OF A CIRCULAR GROVE OF INTRODUCED PINES, MANICURED IN "LOLLIPOP" FASHION. PREVIOUSLY THOUGHT TO BE A TEMPORARY SITE; IN 1989, MONARCHS PERSISTED ALL SEASON, MAKING THIS A SMALL PERMANENT SITE.						
General:	CLUSTERS REPORTEDLY OBSERVED 1983-1985 & 1987. 200+ OBSERVED ON 23 DEC 1989. NONE OBS 15 NOV 1992. 1 ON 10 NOV 1995. 25 IN NOV 1997. 100 OBS IN NOV 98. 0 OBS 7 DEC 2000.						
Owner/Manager:	CITY OF LONG BEACH						
Occurrence No.	296	Map Index:	33185	EO Index:	2746	Element Last Seen:	2014-11-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	2014-11-XX	Record Last Updated:	2015-12-14
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.96355 / -118.44085		Accuracy:	80 meters			
UTM:	Zone-11 N3759049 E366878		Elevation (ft):	15			
PLSS:	T02S, R15W, Sec. 27, S (S)		Acres:	0.0			
Location:	BALLONA WETLANDS ER, AT THE N END OF FALMOUTH AVE, ABOUT 0.25 MI SSW OF CULVER BLVD AT W JEFFERSON BLVD, LOS ANGELES.						
Detailed Location:	XERCES SITE #2879.						
Ecological:	ROOST TREES CONSIST OF A SMALL, DENSE EUCALYPTUS GROVE, ON THE EDGE OF THE WETLAND. BLUFF WITH MILKWEED MAY BE A BREEDING SITE (1991). FIRST RECORD OF AGGREGATIONS AT THIS SITE DATE FROM 1936-1940.						
General:	10S OBSERVED, 1980-82. UP TO 500 OBS, NOV 1985. 500 OBS, 1988-89. UP TO 5000 OBS, 1990-91. 1000-1,150 OBS DEC 1997. 5 OBS 7 DEC 2000. 90 OBS 30 NOV 2001. 0 OBS IN 2002, 80 IN 2003 DURING ANNUAL COUNTS. OBS IN OCT 2010 & 2011. 60 IN 2014.						
Owner/Manager:	DFG-BALLONA WETLANDS ER						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	297	Map Index: 33186	EO Index: 2683	Element Last Seen:	2000-12-07
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2014-11-XX
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	2015-10-14
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.80337 / -118.38474		Accuracy:	non-specific area	
UTM:	Zone-11 N3741216 E371822		Elevation (ft):	300	
PLSS:	T04S, R14W, Sec. 30 (S)		Acres:	87.0	
Location:	VIA LA SELVA, FROM ITS WEST END NEAR PALOS VERDES BLVD TO THE VIA PASCUAL INTERSECTION, PALOS VERDES ESTATES.				
Detailed Location:	TREATED AS TWO SITES IN MONARCH PROGRAM/XERCES SOCIETY COUNTS: VIA LA SELVA & VIA CAPAY (XERCES SITE #2893) AND #2817 VIA LA SELVA (XERCES SITE #2894). (XERCES ALSO HAS OVERALL SITE, #2880 BASED ON OLD CNDDDB OCCURRENCE).				
Ecological:	EUCALYPTUS WINDROWS IN YARDS OF PRIVATE RESIDENCES ON BOTH SIDES OF THE STREET; ROOST SITES VARY FROM YEAR TO YEAR. IN 1998, AT LEAST, CLUSTERS WEREN'T LOCATED BUT NUMBER OF FLYERS INDICATED THERE WERE AGGREGATIONS NEARBY.				
General:	REPORTS OF LARGE CLUSTERS IN 1960S. 30K REPORTED, DEC 1984. 10S ON 17 JAN 1986. AT VIA CAPAY: 3K/1985, 300/1998, 150/2000, 10/2001. 3/2003, 0/2014. AT #2817: 800/1998, 0/2000, 10/2001, 6/2003, 0/2014.				
Owner/Manager:	PVT				
Occurrence No.	298	Map Index: 33187	EO Index: 2682	Element Last Seen:	2003-11-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2014-11-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-10-07
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.82964 / -118.37414		Accuracy:	specific area	
UTM:	Zone-11 N3744116 E372843		Elevation (ft):	100	
PLSS:	T04S, R14W, Sec. 17 (S)		Acres:	10.5	
Location:	WILDERNESS PARK, NORTH OF SEPULVEDA BLVD, 0.5 MILE WEST OF PALOS VERDES BLVD, REDONDO BEACH.				
Detailed Location:	XERCES SITE #2881.				
Ecological:	ROOST TREES ARE EUCALYPTUS.				
General:	CLUSTERS OBSERVED, NOV 1989. 200 OBS, 15 NOV 1997. 300 OBS, 8 NOV 1998. 0 OBS 7 DEC 2000. 35 OBS 30 NOV 2001. 20 OBS IN 2003, 12 IN 2007, 2 IN 2008, AND 2 IN 2014 DURING THANKSGIVING COUNTS.				
Owner/Manager:	CITY OF REDONDO BEACH				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	338	Map Index: 47887	EO Index: 47887	Element Last Seen:	1985-01-23
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1985-01-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-11-17
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.70661 / -118.29434		Accuracy:	non-specific area	
UTM:	Zone-11 N3730378 E380057		Elevation (ft):	100	
PLSS:	T05S, R14W, Sec. 25, SE (S)		Acres:	16.1	
Location:	POINT FERMIN PARK, ON THE SOUTH SIDE OF PASEO DEL MAR AT GAFFEY ST, AT THE SOUTHERN TIP OF THE PALOS VERDES PENINSULA.				
Detailed Location:	XERCES SITE #2885.				
Ecological:	HABITAT CONSISTED MAINLY OF EUCALYPTUS TREES. 1984: ROOSTS IN EUCALYPTUS TREES WITHIN CITY PARK, NEAR PLAYGROUND.				
General:	100-200 REPORTEDLY OBSERVED EACH YEAR, 1970S-1980S. LOW 1000S OBS 28 DEC 1984. CLUSTERS OBS 23 JAN 1985, NONE OBS MAR 1985. SITE REPORTED AS LOST WHEN TREES WERE REMOVED SOMETIME AFTER 1985.				
Owner/Manager:	DHS-COAST GUARD, UNKNOWN				
Occurrence No.	339	Map Index: 47888	EO Index: 47888	Element Last Seen:	197X-12-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	197X-12-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-10-30
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.92112 / -118.41194		Accuracy:	non-specific area	
UTM:	Zone-11 N3754307 E369484		Elevation (ft):	100	
PLSS:	T03S, R15W, Sec. 12, SW (S)		Acres:	20.0	
Location:	RECREATION PARK, AT THE SE CORNER OF PINE AVE AND EUCALYPTUS DRIVE, EL SEGUNDO.				
Detailed Location:	XERCES SITE #2886. 1985 REPORT REFERS TO "EL SEGUNDO PARK;" THERE'S A CHANCE THAT SOMEWHERE ALONG THE LINE, SURVEYORS GOT MIXED UP ABOUT WHICH PARK WAS MEANT.				
Ecological:	AUTUMNAL ROOST SITE IN EUCALYPTUS, OLIVE AND PINE TREES.				
General:	100S OBSERVED DURING THE LATE 1970'S. CLUSTERS HAVE NOT BEEN OBSERVED SINCE CONSTRUCTION OF MUSIC BANDSTAND IN (AFTER?) 1978.				
Owner/Manager:	CITY OF EL SEGUNDO				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	382	Map Index: 97751	EO Index: 99118	Element Last Seen:	2015-01-21
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2015-01-21
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-10-28
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.98547 / -118.45210		Accuracy:	1/10 mile	
UTM:	Zone-11 N3761495 E365873		Elevation (ft):	15	
PLSS:	T02S, R15W, Sec. 21, NE (S)		Acres:	0.0	
Location:	NORTH SIDE OF ADMIRALTY WAY BETWEEN MARINA CITY DRIVE AND VIA REGATTA, MARINA DEL REY.				
Detailed Location:	MAPPED TO GIVEN COORDINATES.				
Ecological:	ROOST TREES WERE EUCALYPTUS LINING A POPULAR BIKE PATH, ADJACENT TO A MANAGED FLOOD DETENTION BASIN AND URBAN PARK. SEVERAL LARGE EUCALYPTUS PRESENT.				
General:	48 OBSERVED ON 31 DEC 2014. 15-20 OBSERVED ROOSTING AND FORAGING IN THE VICINITY ON 21 JAN 2015.				
Owner/Manager:	UNKNOWN				
Occurrence No.	383	Map Index: 97758	EO Index: 99136	Element Last Seen:	2014-11-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2014-11-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-10-07
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.91540 / -118.40050		Accuracy:	1/10 mile	
UTM:	Zone-11 N3753659 E370533		Elevation (ft):	100	
PLSS:	T03S, R15W, Sec. 13, NE (S)		Acres:	0.0	
Location:	CHEVRON EMPLOYEES PARK, ON SOUTH SIDE OF EL SEGUNDO BLVD AT KANSAS STREET IN EL SEGUNDO.				
Detailed Location:	CHEVRON EL SUGUNDO REFINERY. XERCES SITE #2888, MAPPED TO PROVIDED SHAPEFILE.				
Ecological:					
General:	250 OBSERVED ON 8 NOV 1998. 25 ON 7 DEC 2000. 500 ON 30 NOV 2001. 10 IN 2003 AND 30 IN 2014 DURING THANKSGIVING COUNTS.				
Owner/Manager:	PVT-CHEVRON				
Occurrence No.	384	Map Index: 97762	EO Index: 99141	Element Last Seen:	2008-11-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2014-11-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-10-08
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.79032 / -118.25819		Accuracy:	non-specific area	
UTM:	Zone-11 N3739619 E383519		Elevation (ft):	40	
PLSS:	T04S, R13W, Sec. 32, NE (S)		Acres:	27.0	
Location:	BANNING PARK, AT THE SOUTHWEST CORNER OF HWY 1 AND EUBANK AVE, WILMINGTON.				
Detailed Location:	XERCES SITE #2887.				
Ecological:					
General:	125 OBSERVED ON 25 NOV 1998. 50 ON 7 DEC 2000. 10 ON 30 NOV 2001. 6 IN 2003, 20 IN 2008, AND 0 IN 2014 DURING THANKSGIVING COUNTS.				
Owner/Manager:	CITY OF LOS ANGELES				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	385	Map Index:	97766	EO Index:	99151	Element Last Seen:	2008-11-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2014-11-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-10-28	

Quad Summary: Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.77810 / -118.13400	Accuracy:	2/5 mile
------------------	-----------------------	------------------	----------

UTM:	Zone-11 N3738130 E395003	Elevation (ft):	50
-------------	--------------------------	------------------------	----

PLSS:	T05S, R12W, Sec. 04, NE (S)	Acres:	0.0
--------------	-----------------------------	---------------	-----

Location: RECREATION PARK, BETWEEN E ANAHEIM ST AND 6TH ST, HWY 1 AND PARK AVE, LONG BEACH.

Detailed Location: XERCES SITES #2890 ("RECREATION PARK (NORTH)") AND #2891 ("RECREATION PARK (SOUTH)"). MAPPED GENERALLY TO VICINITY OF PARK, EXACT ROOST TREE LOCATIONS NOT KNOWN.

Ecological:

General: NORTH SITE, COUNT/YEAR: 150/1997, 70/1998, 130/200, 40/2001, 0/2003, 25/2008, 0/2014. SOUTH SITE, COUNT/YEAR: 750/1997, 0/1998, 20/2000, 3/2001, 3/2003, 120/2008, 5/2014.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	408	Map Index:	98295	EO Index:	99712	Element Last Seen:	1985-11-29
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1985-11-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-11-25	

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.95790 / -118.43290	Accuracy:	1/10 mile
------------------	-----------------------	------------------	-----------

UTM:	Zone-11 N3758413 E367603	Elevation (ft):	100
-------------	--------------------------	------------------------	-----

PLSS:	T02S, R15W, Sec. 34, NE (S)	Acres:	0.0
--------------	-----------------------------	---------------	-----

Location: "CROSS CREEK CONDO" SITE, EAST SIDE OF GULANA STREET (91ST ST) JUST SOUTH OF REDLANDS STREET IN PLAYA DEL RAY.

Detailed Location: ADDRESS GIVEN AS 8650 GULANA. SIGN VISIBLE IN 2015 GOOGLE STREET VIEW GIVES NAME "CROSS CREEK VILLAGE."

Ecological: ROOST TREES WERE PINES AND MAPLES IN RESIDENTIAL AREA.

General: UP TO 250 OBSERVED IN NOV 1985. SITE VIABILITY UNKNOWN, NEEDS FIELDWORK.

Owner/Manager: PVT

Occurrence No.	409	Map Index:	98324	EO Index:	99745	Element Last Seen:	1985-11-03
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1985-11-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-12-16	

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.86475 / -118.35808	Accuracy:	non-specific area
------------------	-----------------------	------------------	-------------------

UTM:	Zone-11 N3747990 E374381	Elevation (ft):	100
-------------	--------------------------	------------------------	-----

PLSS:	T03S, R14W, Sec. 33, SW (S)	Acres:	18.0
--------------	-----------------------------	---------------	------

Location: EL NIDO PARK, ON THE SOUTH SIDE OF 182ND ST BETWEEN THE RAILROAD TRACKS AND KINGSDALE AVE, TORRANCE.

Detailed Location: "NORTHWEST CORNER OF PARK, NEXT TO THE RAILROAD TRACKS. NORTH OF THE RESTROOMS."

Ecological: ROOST TREES WERE EUCALYPTUS.

General: 50-75 OBSERVED CLUSTERING ON 17 NOV 1985.

Owner/Manager: CITY OF TORRANCE



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database

**Gonidea angulata**

Element Code: IMBIV19010

western ridged mussel

Listing Status: Federal: None**CNDDDB Element Ranks: Global:** G3**State:** None**State:** S1S2**Other:****Habitat: General:** PRIMARILY CREEKS & RIVERS & LESS OFTEN LAKES. ORIGINALLY IN MOST OF STATE, NOW EXTIRPATED FROM CENTRAL & SOUTHERN CALIF.**Micro:**

Occurrence No.	153	Map Index:	B6054	EO Index:	119087	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:			1993-XX-XX
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2020-08-31

Quad Summary: Long Beach (3311872), South Gate (3311882), Los Angeles (3411812), Hollywood (3411813), Burbank (3411823), Van Nuys (3411824), Canoga Park (3411825), Calabasas (3411826)**County Summary:** Los Angeles

Lat/Long:	34.05581 / -118.22744	Accuracy:	non-specific area
UTM:	Zone-11 N3769024 E386720	Elevation (ft):	283
PLSS:	T01S, R13W, Sec. 27 (S)	Acres:	7001.0

Location: LOS ANGELES RIVER.**Detailed Location:** LOCALITY LISTED IN HANNIBAL (1912) AND INGRAM (1948), REPORTEDLY BASED ON STEARNS (1882?) AND DALL (1908) THOUGH THE LATTER REFERENCE GIVES LOCALITY AS "VALLEY OF LOS ANGELES," NOT THE RIVER SPECIFICALLY.**Ecological:** LISTED AS HISTORICAL SITE IN HOWARD (2010).**General:** LOCALITY LISTED IN 1912 AND 1948 ARTICLES. NONE FOUND IN 1991-92 SURVEY OF RIVER. PRESUMED EXTIRPATED, WAS NOT RESAMPLED IN 2008-2010 STUDY.**Owner/Manager:** UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Glyptostoma gabrielense</i>		Element Code: IMGASB1010	
San Gabriel chestnut			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other:		
Habitat:	General: TERRESTRIAL		
	Micro: <input type="checkbox"/>		

Occurrence No.	19	Map Index: B5925	EO Index: 118937	Element Last Seen:	1953-05-22
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1953-05-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-07-30

Quad Summary: Long Beach (3311872), South Gate (3311882)
County Summary: Los Angeles

Lat/Long:	33.86276 / -118.23165	Accuracy:	1 mile
UTM:	Zone-11 N3747622 E386074	Elevation (ft):	189
PLSS:	T03S, R13W, Sec. 34 (S)	Acres:	1987.0

Location: VICINITY OF DOMINGUEZ HILLS.
Detailed Location: GIVEN COLLECTION LOCALITES INCLUDE DOMINGUEZ HILLS, DOMINGUEZ, AND DOMINGUEZ JUNCTION.
Ecological: E. CHACE FOUND SNAILS UNDER DEAD CACTI. OIL EXTRACTION STARTED AT SITE IN THE 1920S. SMITH IN 1970 NOTED SPECIES WAS ENDANGERED AT THIS SITE FROM INDUSTRIAL DEVELOPMENT. AERIAL IMAGERY FROM 2000S SHOWS SITE HAS BEEN COMPLETELY DEVELOPED.
General: COLLECTIONS MADE ON UNKNOWN DATE, IN 1906, 1914, 1917, 1922, 1936, 1937, 1938, 1940, 1941, AND 1953. AREA HAS BEEN HEAVILY DEVELOPED SINCE TIME OF COLLECTION AND POPULATION IS LIKELY EXTIRPATED.
Owner/Manager: UNKNOWN

Occurrence No.	23	Map Index: 34591	EO Index: 118949	Element Last Seen:	19XX-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	19XX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2020-07-28

Quad Summary: San Pedro (3311863), Torrance (3311873)
County Summary: Los Angeles

Lat/Long:	33.74588 / -118.33602	Accuracy:	1 mile
UTM:	Zone-11 N3734781 E376250	Elevation (ft):	
PLSS:	T05S, R14W, Sec. 15 (S)	Acres:	0.0

Location: PALOS VERDES HILLS, WEST OF SAN PEDRO.
Detailed Location: COLLECTION LOCATION DESCRIBED AS "NEAR SAN PEDRO, PALOS VERDES PENINSULA." MAPPED BY CNDDB AS A BEST GUESS IN THE HILLS WEST OF SAN PEDRO.
Ecological: PALOS VERDES HILLS HAVE BEEN HEAVILY DEVELOPED SINCE THE TIME OF COLLECTION.
General: COLLECTED ON UNKNOWN DATE, LIKELY IN THE 1930S OR 1940S. AREA HAS BEEN HEAVILY DEVELOPED SINCE THEN. OCCURRENCE IS POSSIBLY EXTIRPATED.
Owner/Manager: UNKNOWN

<i>Tryonia imitator</i>		Element Code: IMGASJ7040	
mimic tryonia (=California brackishwater snail)			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: IUCN_DD-Data Deficient		
Habitat:	General:		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



INHABITS COASTAL LAGOONS, ESTUARIES AND SALT MARSHES, FROM SONOMA COUNTY SOUTH TO SAN DIEGO COUNTY.

Micro: FOUND ONLY IN PERMANENTLY SUBMERGED AREAS IN A VARIETY OF SEDIMENT TYPES; ABLE TO WITHSTAND A WIDE RANGE OF SALINITIES.

Occurrence No.	16	Map Index:	36780	EO Index:	23211	Element Last Seen:	1974-XX-XX
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		2001-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-07-21	

Quad Summary: Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.97220 / -118.43699	Accuracy:	non-specific area
UTM:	Zone-11 N3760003 E367248	Elevation (ft):	
PLSS:	T02S, R15W, Sec. 27 (S)	Acres:	60.3

Location: BALLONA CREEK, LOS ANGELES.

Detailed Location: MAPPED ALONG BALLONA CREEK TO THE CONFLUENCE OF CENTINELA CREEK NEAR PLAYA DEL REY.

Ecological: HABITAT IS COASTAL LAGOONS OR BRACKISH WATER-ESTUARINE STREAM-MOUTH AREAS.

General: LACM SPECIMEN #10572. STATUS UNCERTAIN; RECORD BASED ON EMPTY SHELLS. FIRST KNOWN OCCURRENCE IN 1974; NO SUBSEQUENT COLLECTIONS. NOT FOUND DURING SURVEYS FOR THE PLAYA VISTA DEVELOPMENT (PSOMAS & LOCKHART 2001 IN PWA06R0001).

Owner/Manager: DPR-DOCKWEILER SB

Occurrence No.	30	Map Index:	57921	EO Index:	57937	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		XXXX-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2004-11-05	

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.71045 / -118.30057	Accuracy:	specific area
UTM:	Zone-11 N3730811 E379485	Elevation (ft):	50
PLSS:	T05S, R14W, Sec. 25 (S)	Acres:	217.3

Location: SAN PEDRO BLUFFS.

Detailed Location: USNM RECORD GIVES "NEAREST PLACE NAME" AS SAN PEDRO. FOUND IN PLEISTOCENE DEPOSITS ON SAN PEDRO BLUFFS.

Ecological:

General: USNM #153426 COLLECTED BY HEMPHILL, NO DATE GIVEN. LAST KNOWN COLLECTION 1870-1890. NO RECENT COLLECTIONS. EXTIRPATED AT THIS SITE, ACCORDING TO KELLOGG.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.:	42	Map Index:	85175	EO Index:	86194	Element Last Seen:	2007-12-05
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2007-12-05	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-02-24	
Quad Summary:	San Pedro (3311863), Torrance (3311873)						
County Summary:	Los Angeles						
Lat/Long:	33.75072 / -118.28454			Accuracy:	1/5 mile		
UTM:	Zone-11 N3735257 E381025			Elevation (ft):	59		
PLSS:	T05S, R13W, Sec. 07 (S)			Acres:	0.0		
Location:	KNOLL HILL IN SAN PEDRO.						
Detailed Location:	NO INFORMATION GIVEN ABOUT WHERE THE SNAILS WERE COLLECTED ON KNOLL HILL. MAPPED TO KNOLL HILL, BUT PROBABLY COLLECTED FROM TURNING BASIN OF LOS ANGELES HARBOR.						
Ecological:	NO OBVIOUS SUITABLE HABITAT ON KNOLL HILL VISIBLE IN AERIAL PHOTOS. POSSIBLE COLLECTION SITE IS THE HARBOR INLET ON KNOLL DRIVE NW OF KNOLL HILL. HIGHLY INDUSTRIALIZED HARBOR BASIN.						
General:	100 COLLECTED 5 DEC 2007 BY P.A. KLOESS (NMNH 1122517; FIELD NUMBER PAK120507-B6: SWCA INC CONSULTING #4).						
Owner/Manager:	CITY OF LOS ANGELES						

<i>Eryngium aristulatum var. parishii</i>			Element Code: PDAPI0Z042				
San Diego button-celery							
Listing Status:	Federal:	Endangered	CNDDB Element Ranks:	Global:	G5T1		
	State:	Endangered		State:	S1		
Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank						
Habitat:	General:	VERNAL POOLS, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.					
	Micro:	SAN DIEGO MESA HARDPAN & CLAYPAN VERNAL POOLS & SOUTHERN INTERIOR BASALT FLOW VERNAL POOLS; USUALLY SURROUNDED BY SCRUB. 15-880 M.					

Occurrence No.:	120	Map Index:	95346	EO Index:	96484	Element Last Seen:	1901-07-20
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1901-07-20	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-03-03	
Quad Summary:	Inglewood (3311883), Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.92366 / -118.37848			Accuracy:	1 mile		
UTM:	Zone-11 N3754547 E372581			Elevation (ft):			
PLSS:	T03S, R14W, Sec. 08 (S)			Acres:	0.0		
Location:	WISEBURN.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS AROUND THE HISTORIC TOWN OF WISEBURN.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1901 ABRAMS COLLECTION.						
Owner/Manager:	UNKNOWN						

<i>Chaenactis glabriuscula var. orcuttiana</i>			Element Code: PDAST20095				
Orcutt's pincushion							
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G5T1T2		
	State:	None		State:	S1		
Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank						
Habitat:	General:	COASTAL BLUFF SCRUB, COASTAL DUNES.					



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Micro:	SANDY SITES. 3-80 M.		
---------------	----------------------	--	--

Occurrence No.	20	Map Index:	79025	EO Index:	47545	Element Last Seen:	2010-05-13
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:	2010-05-13		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2016-06-15		

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.89918 / -118.41276	Accuracy:	80 meters
UTM:	Zone-11 N3751875 E369375	Elevation (ft):	125
PLSS:	T03S, R15W, Sec. 24, NW (S)	Acres:	0.0

Location: SAND DUNE PARK, MANHATTAN BEACH.
Detailed Location: BEHIND CITY OF MANHATTAN BEACH'S MAINTENANCE YARD WITHIN SAND DUNE PARK.
Ecological: REMNANT SAND DUNE. ASSOCIATED VEGETATION INCLUDED CARPOBROTUS EDULIS, ABRONIA VILLOSA, LUPINUS CHAMISSONIS, CAMISSONIA CHEIRANTHIFOLIA, PHACELIA RAMOSISSIMA, STEPHANOMERIA SP, AND AMBROSIA CHAMISSONIS.
General: SEEN IN 2009. 185 PLANTS SEEN IN 2010. A 1929 BETTYS COLLECTION FROM "MANHATTAN BEACH" IS ALSO ATTRIBUTED TO THIS SITE.
Owner/Manager: CITY OF MANHATTAN BEACH

Occurrence No.	21	Map Index:	79013	EO Index:	47564	Element Last Seen:	2011-04-08
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2011-04-08		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2016-06-15		

Quad Summary: Venice (3311884)
County Summary: Los Angeles

Lat/Long:	33.962 / -118.44956	Accuracy:	80 meters
UTM:	Zone-11 N3758889 E366071	Elevation (ft):	20
PLSS:	T02S, R15W, Sec. 33, NE (S)	Acres:	5.0

Location: BALLONA WETLANDS, PLAYA DEL REY.
Detailed Location: ON A NARROW STRIP OF COASTAL STRAND [BEACH] ALONG THE WESTERN BOUNDARY OF AREA 1. MAPPED BY CNDDDB ACCORDING TO 2011 COOPER COORDINATES.
Ecological: ON COASTAL DUNES. IN 2011, PLANTS OBSERVED IN DUNE RESTORATION AREA WHERE ICEPLANT HAD BEEN REMOVED ON BACK DUNE.
General: LIKELY OBSERVED AT THIS SITE IN 1981, 1991, 1992, 2001, 2002, AND 2005 (ACC TO JOHNSON 2011). "~1000 FLOWERS" WERE SEEN IN 2010, UNKNOWN NUMBER OBSERVED IN 2011. VAGUE COLLECTIONS FROM PLAYA DEL REY ARE ALSO ATTRIBUTED TO THIS SITE.
Owner/Manager: DFG-BALLONA WETLANDS ER



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	36	Map Index:	A0653	EO Index:	102210	Element Last Seen:	2001-05-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2001-05-13	Record Last Updated:	2016-06-20
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.90258 / -118.41854	Accuracy:	1/10 mile				
UTM:	Zone-11 N3752260 E368846	Elevation (ft):					
PLSS:	T03S, R15W, Sec. 23 (S)	Acres:	18.0				
Location:	MANHATTAN BEACH, NW CORNER OF TOWN NEAR EL SEGUNDO, CORNER OF HIGHLAND AND EL PORTO STREET.						
Detailed Location:	MAPPED AS BEST GUESS AROUND GIVEN INTERSECTION. GIVEN ELEVATION IS ABOUT 10 FEET WHICH SUGGESTS SITE MAY HAVE BEEN COLLECTED CLOSER TO COAST.						
Ecological:	DUNE FRAGMENT.						
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2001 GEORGE COLLECTION.						
Owner/Manager:	UNKNOWN						
Occurrence No.	37	Map Index:	A0655	EO Index:	102212	Element Last Seen:	1986-04-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1986-04-01	Record Last Updated:	2016-06-20
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.94172 / -118.43801	Accuracy:	4/5 mile				
UTM:	Zone-11 N3756625 E367107	Elevation (ft):					
PLSS:	T03S, R15W, Sec. 3 (S)	Acres:	1312.0				
Location:	EL SEGUNDO DUNES, BACK EDGE OF THE BEACH JUST WEST OF LOS ANGELES INTERNATIONAL AIRPORT.						
Detailed Location:	MAPPED AS BEST GUESS AROUND THE DUNE AREA JUST WEST OF THE AIRPORT.						
Ecological:	FLATS AT FOOT OF DUNES WITH ERIOGONUM FASCICULATUM AND E. PARVIFOLIUM.						
General:	SITE BASED ON A 1986 MATTONI COLLECTION. 1933 JOHNSON AND 1935 PURER COLLECTIONS FROM DUNES NEAR EL SEGUNDO ARE ALSO ATTRIBUTED TO THIS SITE.						
Owner/Manager:	UNKNOWN						
Occurrence No.	38	Map Index:	A0657	EO Index:	102214	Element Last Seen:	2015-05-20
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:	2015-05-20	Record Last Updated:	2016-06-22
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.97083 / -118.45858	Accuracy:	specific area				
UTM:	Zone-11 N3759880 E365252	Elevation (ft):	10				
PLSS:	T02S, R15W, Sec. 28 (S)	Acres:	5.0				
Location:	WEST BANK OF BALLONA LAGOON.						
Detailed Location:	MAPPED AS 2 POLYGONS ACCORDING TO A 2010 JONES MAP.						
Ecological:	OPEN UPLAND AREAS WITH MOSTLY SANDY SOILS, AWAY FROM THE UPPER HIGH TIDE LINE. VEGETATION ON THE LAGOON BANKS INCLUDES BOTH NATIVE AND NON-NATIVE PLANT SPECIES FROM COASTAL ESTUARY, COASTAL STRAND, AND COASTAL DUNE PLANT COMMUNITIES.						
General:	APPROXIMATELY 27,500 PLANTS OBSERVED IN 2010. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2015.						
Owner/Manager:	CITY OF LOS ANGELES						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Centromadia parryi ssp. australis		Element Code: PDAST4R0P4	
southern tarplant			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3T2
	State: None		State: S2
Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, SB_SBBG-Santa Barbara Botanic Garden		
Habitat:	General: MARSHES AND SWAMPS (MARGINS), VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.		
	Micro: OFTEN IN DISTURBED SITES NEAR THE COAST AT MARSH EDGES; ALSO IN ALKALINE SOILS SOMETIMES WITH SALTGRASS. SOMETIMES ON VERNAL POOL MARGINS. 0-975 M.		

Occurrence No.	25	Map Index: 35371	EO Index: 29314	Element Last Seen:	1932-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1932-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1997-03-17
Quad Summary:	Long Beach (3311872)				
County Summary:	Los Angeles				
Lat/Long:	33.78593 / -118.18194		Accuracy:	non-specific area	
UTM:	Zone-11 N3739048 E390574		Elevation (ft):	15	
PLSS:	T04S, R12W, Sec. 31, NW (S)		Acres:	184.7	
Location:	BRYANT RANCH NEAR LONG BEACH, NORTH OF 7TH STREET AND EAST OF ATLANTIC AVE.				
Detailed Location:	COLLECTED IN T04S R12W NW 1/4 SECTION 31.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1932 COLLECTION BY SNOW.				
Owner/Manager:	UNKNOWN				

Occurrence No.	27	Map Index: 97162	EO Index: 30105	Element Last Seen:	199X-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1997-10-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-08-10
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles				
Lat/Long:	33.97876 / -118.43071		Accuracy:	non-specific area	
UTM:	Zone-11 N3760723 E367838		Elevation (ft):		
PLSS:	T02S, R15W, Sec. 23, SW (S)		Acres:	76.0	
Location:	BALLONA MARSHES; JUST EAST OF CA-1 AND NORTH OF BALLONA CREEK.				
Detailed Location:	MAPPED ACCORDING TO A MAP IN A 2006 REPORT WHICH INDICATES THIS SPECIES OCCURS IN "AREA C."				
Ecological:	EDGE OF SALT MARSH SUPPORTING SALICORNIA VIRGINICA & SPARTINA FOLIOSA.				
General:	30 PLANTS SEEN HERE IN THE 1990'S ACC TO C. SPRINGITT (PLAYA VISTA ENVIRONMENTAL PLANNER) AS REPORTED IN GAR97R0001. NO PLANTS SEEN BY GARDINER IN 1997. COLLECTIONS FROM MARINA DEL REY, DEL REY HILLS, AND MESMER ATTRIBUTED HERE, AS WELL.				
Owner/Manager:	DFG-BALLONA WETLANDS ER, PVT				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	29	Map Index: 35369	EO Index: 7744	Element Last Seen:	1931-07-31
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1931-07-31
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1997-02-04

Quad Summary: South Gate (3311882)
County Summary: Los Angeles

Lat/Long:	33.98902 / -118.13773	Accuracy:	2/5 mile
UTM:	Zone-11 N3761522 E394916	Elevation (ft):	60
PLSS:	T02S, R12W (S)	Acres:	0.0

Location: EAST LOS ANGELES, TELEGRAPH ROAD NEAR SANTA FE RAILROAD CROSSING.
Detailed Location: MAPPED EAST OF THE SANTA ANA FREEWAY (I-5) AT GARFIELD AVE NEAR THE ATCHISON, TOPEKA AND SANTA FE TRACKS, CITY OF COMMERCE.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1931 COLLECTION BY EWAN. SPECIMEN FILED IN H. PUNGENS FILE AT RSA, BUT HAS BEEN TENTATIVELY IDENTIFIED TO H. PARRYI SSP. AUSTRALIS BY D. BRAMLET (1990).
Owner/Manager: UNKNOWN

Occurrence No.	30	Map Index: 28742	EO Index: 30040	Element Last Seen:	1905-07-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1905-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1997-02-04

Quad Summary: Inglewood (3311883)
County Summary: Los Angeles

Lat/Long:	33.95930 / -118.35104	Accuracy:	1 mile
UTM:	Zone-11 N3758465 E375170	Elevation (ft):	100
PLSS:	T02S, R14W (S)	Acres:	0.0

Location: INGLEWOOD, NEAR LOS ANGELES.
Detailed Location:
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1905 COLLECTION BY HALL.
Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	31	Map Index: 28743	EO Index: 30041	Element Last Seen:	1933-09-22
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1997-10-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-08-27

Quad Summary: Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.95803 / -118.26836	Accuracy:	2/5 mile
UTM:	Zone-11 N3758227 E382808	Elevation (ft):	125
PLSS:	T02S, R13W, Sec. 32 (S)	Acres:	0.0

Location: LOS ANGELES, VACANT LOT ON 87TH STREET NEAR AVALON BLVD.

Detailed Location: MAPPED SOUTH OF MANCHESTER AVE & WEST OF AVALON BLVD IN LOS ANGELES. SITE AT 87TH STREET HAD BEEN CONVERTED INTO HOUSING TRACTS & APARTMENTS W/NEARBY GOLF COURSE & PARK WHEN VISITED BY GARDINER IN 1997.

Ecological:

General: MAPPED BASED ON 1933 COLLECTION BY MCFADDEN. THIS SPECIMEN FOUND IN H. PUNGENS FILE AT RSA AND TENTATIVELY IDENTIFIED TO H. PARRYI SSP. AUSTRALIS BY D. BRAMLET (1990).

Owner/Manager: UNKNOWN

Occurrence No.	37	Map Index: 35368	EO Index: 30042	Element Last Seen:	2008-XX-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2008-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-02-08

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.7794 / -118.29182	Accuracy:	non-specific area
UTM:	Zone-11 N3738446 E380392	Elevation (ft):	20
PLSS:	T05S, R13W, Sec. 6, NW (S)	Acres:	516.0

Location: AT HARBOR LAKE REGIONAL PARK AND AT THE NAVAL DEFENSE FUEL SUPPORT POINT. LOS ANGELES.

Detailed Location: 6 POLYGONS MAPPED BY CNDDB. 5 NE POLYGONS ARE SPECIFIC, MAPPED ACCORDING TO A 2011 ICF MAP. SW POLYGON IS NON-SPECIFIC, MAPPED BY CNDDB TO COVER ALL OF THE DEFENSE FUEL SUPPORT POINT.

Ecological: IN NARROW STRIP BETWEEN LOWER MARSH AND MULE FAT / WILLOW ZONE. GROWS MAINLY WITH DISTICHLIS SPICATA IN ADDITION TO SALSOLA AUSTRALIS, BASSIA HYSSOPIFOLIA, BRASSICA NIGRA, HIRSCHFELDIA INCANA, ATRIPLEX SEMIBACCATA, ANNUAL GRASSES, ETC.

General: HARBOR PARK (NE POLYS): 1500-2000 PLANTS ESTIMATED IN 1991, 95,640 ESTIMATED IN 2008, SOME HABITAT RESTORED/CREATED FOR TRANSPLANT OF SEEDS FROM EO#109. SW POLYGON IS BASED ON GEORGE COLLECTIONS FROM 2000 & 2001, NEEDS FIELDWORK.

Owner/Manager: DOD-NAVY, CITY OF LOS ANGELES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	43	Map Index:	97121	EO Index:	34585	Element Last Seen:	2010-09-30
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2010-09-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-08-05	

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.82690 / -118.34180	Accuracy:	specific area
UTM:	Zone-11 N3743773 E375832	Elevation (ft):	80
PLSS:	T04S, R14W, Sec. 15, SW (S)	Acres:	20.0

Location: MADRONA MARSH NATURE PRESERVE, NORTH OF SEPULVEDA BLVD, BETWEEN MAPLE AVE AND MADRONA AVENUE.

Detailed Location: MAPPED ACCORDING TO A MAP PROVIDED IN A 2012 COOPER REPORT. NATURAL DISTRIBUTION OF PLANT MAY BE LARGER THAN CURRENTLY MAPPED AS LATE SUMMER MOWING IN 2010 LIKELY ELIMINATED STANDING STALKS PRIOR TO SURVEY.

Ecological: ALONG THE INNER AND OUTER EDGES OF SEVERAL LARGE VERNAL POOLS. ANNUAL GRASSLAND, WILLOW WOODLAND, AND COASTAL SAGE SCRUB.

General: SEVERAL THOUSAND PLANTS OBSERVED IN 1997. 48,169 PLANTS ESTIMATED IN 2010. A 2009 SANDERS COLLECTION IS ALSO ATTRIBUTED TO THIS OCCURRENCE, PLANTS NOTED AS "FAIRLY COMMON."

Owner/Manager: CITY OF TORRANCE-MADRONA MARSH

Occurrence No.	81	Map Index:	77193	EO Index:	78129	Element Last Seen:	2014-07-03
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2014-07-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-08-07	

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.84299 / -118.33022	Accuracy:	specific area
UTM:	Zone-11 N3745543 E376926	Elevation (ft):	65
PLSS:	T04S, R14W, Sec. 10, E (S)	Acres:	11.0

Location: WEST SIDE OF CRENSHAW BLVD, BETWEEN W 208TH STREET AND DOMINGUEZ STREET, TORRANCE.

Detailed Location: TRIANGULAR PARCEL SOUTH OF DOW CHEMICAL FACILITY, APPROXIMATELY 1.6 AIR MILES SOUTH OF 405 FREEWAY. MAPPED AS 3 POLYGONS ACCORDING TO A 2014 HELIX MAP.

Ecological: HIGHLY DISTURBED FORMER TANK FARM; SOIL SURFACE LARGELY COVERED BY IMPORTED GRAVEL, BUT NATIVE PLANTS PERSISTING. NOW MAINTAINED AS OPEN (WASTE) LAND. WITH BROMUS, HORDEUM, SALSOLA, ATRIPLEX SEMIBACCATA, HETEROTHECA GRANDIFLORA, ETC.

General: "VERY COMMON" IN 2008. 350-400 PLANTS OBSERVED IN 2014.

Owner/Manager: PVT



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	85	Map Index: 86322	EO Index: 87361	Element Last Seen:	2009-07-13
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-07-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-07-12

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.85474 / -118.27864	Accuracy:	specific area
UTM:	Zone-11 N3746786 E381715	Elevation (ft):	5
PLSS:	T04S, R13W, Sec. 06, E (S)	Acres:	150.0

Location: SCATTERED ALONG BOTH BANKS OF DOMINGUEZ CHANNEL ON BOTH SIDES OF HWY 110, NORTH OF HWY 405.

Detailed Location: MAPPED ALONG 2.25 MILES OF THE CANAL ACCORDING TO 2009 UTM COORDINATES PROVIDED BY LEATHERMAN.

Ecological: BASE OF SLOPE. ASSOC W/ LEPIDIUM NITIDUM, CONYZA CANADENSIS, PICRIS ECHIOIDES, CHENOPODIUM ALBUM, SALSOLA TRAGUS, RAPHANUS SATIVUS, COTULA AUSTRALIS, AVENA BARBATA, A. FATUA, LOLIUM MULTIFLORUM, POLYPOGON MONSPELIENSIS, PHALARIS MINOR, ETC.

General: 627 PLANTS OBSERVED IN 2009.

Owner/Manager: LAX COUNTY-DPW

Occurrence No.	86	Map Index: 86323	EO Index: 87362	Element Last Seen:	2011-09-06
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2011-09-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-07-12

Quad Summary: Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.90261 / -118.27270	Accuracy:	80 meters
UTM:	Zone-11 N3752087 E382331	Elevation (ft):	100
PLSS:	T03S, R13W, Sec. 17, SW (S)	Acres:	0.0

Location: OIL FIELD AT THE NORTHEAST CORNER OF ROSECRANS AND SOUTH MAIN STREET INTERSECTION, ROSEWOOD DISTRICT, SOUTH LOS ANGELES.

Detailed Location: ACTIVE OIL FIELD, PLANTS ARE LOCATED THROUGHOUT THE SITE. MAPPED BY CNDDDB ACCORDING TO 2011 COORDINATES PROVIDED BY COOPER; DATUM UNKNOWN, MAPPED TO ENCOMPASS NAD27 AND NAD83 POINTS.

Ecological: OIL FIELD.

General: 100-500 PLANTS OBSERVED IN 2011. AREA IS POSSIBLY RATHER SECURE DUE TO OIL OPERATIONS, THOUGH IF FIELD IS RETIRED THEN THE OCCURRENCE COULD BE ELIMINATED.

Owner/Manager: PVT?



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	95	Map Index:	97136	EO Index:	98383	Element Last Seen:	1930-11-04
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1930-11-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-08-06	

Quad Summary: South Gate (3311882), Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.94023 / -118.24246	Accuracy:	4/5 mile
UTM:	Zone-11 N3756225 E385177	Elevation (ft):	
PLSS:	T03S, R13W, Sec. 04 (S)	Acres:	0.0

Location: WATTS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AROUND WATTS.

Ecological: WITH DISTICHLIS, ISOCOMA, ATRIPLEX BRACTEOSA, ETC.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1930 HALL COLLECTION.

Owner/Manager: UNKNOWN

Occurrence No.	109	Map Index:	B2305	EO Index:	114229	Element Last Seen:	2016-07-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2016-07-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2019-02-12	

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.79693 / -118.28961	Accuracy:	specific area
UTM:	Zone-11 N3740388 E380621	Elevation (ft):	17
PLSS:	T04S, R13W, Sec. 30, SW (S)	Acres:	1.0

Location: WILMINGTON DRAIN JUST SOUTH OF LOMITA BOULEVARD, BETWEEN I-110 AND VERMONT AVENUE.

Detailed Location: MAPPED ACCORDING TO A 2011 ICF MAP.

Ecological: DISTURBED ANNUAL GRASSLAND DOMINATED BY HELIOTROPIUM CURASSIVICUM, BROMUS DIANDRUS, MELILOTUS INDICUS, AND OTHER SPECIES. FLAT AREA NEAR FENCE IN HEAVY SOIL.

General: 330 INDIVIDUALS OBSERVED IN 2008. SITE WAS GRADED SOMETIME BETWEEN 2011 AND 2016 AND POPULATION WAS THOUGHT TO BE EXTIRPATED. 47 INDIVIDUALS OBSERVED IN 2016.

Owner/Manager: LAX COUNTY



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Centromadia pungens ssp. laevis</i>		Element Code: PDAST4R0R4	
smooth tarplant			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3G4T2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
Habitat:	General: VALLEY AND FOOTHILL GRASSLAND, CHENOPOD SCRUB, MEADOWS AND SEEPS, PLAYAS, RIPARIAN WOODLAND.		
	Micro: ALKALI MEADOW, ALKALI SCRUB; ALSO IN DISTURBED PLACES. 5-1170 M.		

Occurrence No.	143	Map Index:	34592	EO Index:	113213	Element Last Seen:	1920-04-20
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:	1920-04-20		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2018-11-05		
Quad Summary:	San Pedro (3311863), Torrance (3311873)						
County Summary:	Los Angeles, Pacific Ocean						
Lat/Long:	33.73644 / -118.28092		Accuracy:	1 mile			
UTM:	Zone-11 N3733670 E381341		Elevation (ft):				
PLSS:	T05S, R13W, Sec. 18 (S)		Acres:	0.0			
Location:	SAN PEDRO.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE GENERAL VICINITY OF SAN PEDRO.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1920 EASTWOOD COLLECTION. NEEDS FIELDWORK.						
Owner/Manager:	UNKNOWN						

<i>Isocoma menziesii var. decumbens</i>		Element Code: PDAST57091	
decumbent goldenbush			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3G5T2T3
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank		
Habitat:	General: COASTAL SCRUB, CHAPARRAL.		
	Micro: SANDY SOILS; OFTEN IN DISTURBED SITES. 1-915 M.		

Occurrence No.	101	Map Index:	26479	EO Index:	103371	Element Last Seen:	1897-08-17
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:	1897-08-17		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2016-09-08		
Quad Summary:	San Pedro (3311863), Long Beach (3311872), Torrance (3311873)						
County Summary:	Los Angeles, Pacific Ocean						
Lat/Long:	33.75713 / -118.23704		Accuracy:	1 mile			
UTM:	Zone-11 N3735914 E385434		Elevation (ft):				
PLSS:	T05S, R13W (S)		Acres:	0.0			
Location:	TERMINAL ISLAND.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS AROUND MAIN PORTION OF TERMINAL ISLAND.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1897 GRANT COLLECTION.						
Owner/Manager:	UNKNOWN						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Lasthenia glabrata ssp. coulteri</i>		Element Code: PDAST5L0A1	
Coulter's goldfields			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4T2
	State: None		State: S2
Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden		
Habitat:	General: COASTAL SALT MARSHES, PLAYAS, VERNAL POOLS.		
	Micro: USUALLY FOUND ON ALKALINE SOILS IN PLAYAS, SINKS, AND GRASSLANDS. 1-1375 M.		

Occurrence No.	25	Map Index: 23784	EO Index: 25094	Element Last Seen:	1901-04-10
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1901-04-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-07
Quad Summary:	Inglewood (3311883)				
County Summary:	Los Angeles				
Lat/Long:	33.98167 / -118.33078		Accuracy:	1 mile	
UTM:	Zone-11 N3760921 E377074		Elevation (ft):	160	
PLSS:	T02S, R14W, Sec. 22 (S)		Acres:	0.0	
Location:	HYDE PARK.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS CENTERED ON HYDE PARK.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1901 COLLECTION BY ABRAMS. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				

Occurrence No.	26	Map Index: 80779	EO Index: 24245	Element Last Seen:	1917-04-11
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1917-04-11
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-11-22
Quad Summary:	Torrance (3311873)				
County Summary:	Los Angeles				
Lat/Long:	33.85124 / -118.27455		Accuracy:	1 mile	
UTM:	Zone-11 N3746393 E382089		Elevation (ft):		
PLSS:	T04S, R13W, Sec. 06 (S)		Acres:	0.0	
Location:	DOMINGUEZ SLOUGH, NEAR GARDENA.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS CENTERED ON HISTORIC LOCATION OF DOMINGUEZ SLOUGH. SLOUGH WAS PART OF HISTORICAL WATERSHED OF LOS ANGELES RIVER, NOW LONG GONE.				
Ecological:	GROWING IN MOIST PASTURE.				
General:	SITE BASED ON A 1917 COLLECTION BY JOHNSTON. BRAUNTON 1902 COLLECTION FROM "GARDENA" ATTRIBUTED TO THIS SITE. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	27	Map Index: 23785	EO Index: 30106	Element Last Seen: 1934-04-03
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1980-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-10-01

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.97291 / -118.44837	Accuracy:	1 mile
UTM:	Zone-11 N3760097 E366198	Elevation (ft):	
PLSS:	T02S, R15W, Sec. 28 (S)	Acres:	0.0

Location: BALLONA MARSHES.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS CENTERED ON HISTORICAL BALLONA MARSH AREA AT MOUTH OF BALLONA CREEK.
Ecological: GROWING IN SALT MARSH. 1934 JOHNSON COLLECTION NOTES THAT POPULATION OCCURRED IN DENSE PATCHES IN OLD PLOUGHED GROUND NOW OVERGROWN.
General: SITE BASED ON SEVERAL HISTORICAL COLLECTIONS FROM "BALLONA MARSHES." 1930 FOSBERG & 1933 JOHNSON COLLECTIONS "DEL REY" AND 1934 JOHNSON COLLECTION "DEL REY HILLS, SALT MARSH" ATTRIBUTED TO SITE. AREA SURVEYED IN 1980 BUT NO LASTHENIA SEEN.
Owner/Manager: DFG-BALLONA WETLANDS ER, PVT

Occurrence No.	80	Map Index: 80900	EO Index: 81879	Element Last Seen: 1973-06-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1973-06-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2010-12-20

Quad Summary: Long Beach (3311872)
County Summary: Los Angeles

Lat/Long:	33.84570 / -118.20445	Accuracy:	1 mile
UTM:	Zone-11 N3745700 E388567	Elevation (ft):	20
PLSS:	T04S, R13W, Sec. 11 (S)	Acres:	0.0

Location: WEST OF LOS ANGELES RIVER CHANNEL BETWEEN LONG BEACH BLVD. AND DEL MAR AVE, LONG BEACH.
Detailed Location: ALONG OVERFLOW CHANNEL. EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS IN VICINITY OF THE LOS ANGELES RIVER CHANNEL, LONG BEACH BLVD. AND DEL MAR AVE.
Ecological: IN DISTURBED WEEDY AREA WITH SALSOLA SP., STEPHANOMERIA SP., GRASSES, ETC.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1973 HENRICKSON COLLECTION. COLLECTION STATES LASTHENIA GLABRATA WITH NO SUBSPECIES DESIGNATION. SUBSPECIES COULTERI INFERRED BY RANGE MAPS.
Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	81	Map Index: 80349	EO Index: 81881	Element Last Seen: 1962-03-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1962-03-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2019-05-06

Quad Summary: Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.78887 / -118.28864	Accuracy:	4/5 mile
UTM:	Zone-11 N3739493 E380698	Elevation (ft):	
PLSS:	T04S, R13W, Sec. 31 (S)	Acres:	0.0

Location: NORTHEAST OF BIXBY SLOUGH, NORTH OF WILMINGTON.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS IN THE VICINITY OF HARBOR LAKE AND SURROUNDING MARSH AREAS. BIXBY SLOUGH IS NOW HARBOR REGIONAL PARK.

Ecological: FORMING BRIGHT GOLDEN PATCHES ALONG THE EDGE OF THE SALT MARSH WITH SALICORNIA SP.

General: ONLY SOURCE OF INFORMATION IS A 1962 RAVEN COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	83	Map Index: 01557	EO Index: 81892	Element Last Seen: 1930-01-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1930-01-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2010-11-30

Quad Summary: Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.91505 / -118.42810	Accuracy:	1 mile
UTM:	Zone-11 N3753655 E367981	Elevation (ft):	
PLSS:	T03S, R15W, Sec. 14 (S)	Acres:	0.0

Location: EL SEGUNDO.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS CENTERED ON EL SEGUNDO COASTLINE.

Ecological:

General: ONLY SOURCE OF INFORMATION IS A 1930 DAVIDSON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

<i>Pentachaeta lyonii</i>		Element Code: PDAST6X060
Lyon's pentachaeta		
Listing Status:	Federal: Endangered	CNDDDB Element Ranks: Global: G1
	State: Endangered	State: S1
Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	
Habitat:	General: CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, COASTAL SCRUB.	
	Micro: EDGES OF CLEARINGS IN CHAPARRAL, USUALLY AT THE ECOTONE BETWEEN GRASSLAND AND CHAPARRAL OR EDGES OF FIREBREAKS. 30-670 M.	



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: 01943	EO Index: 16675	Element Last Seen:	1910-03-21
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1997-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2008-09-24

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.70639 / -118.29341	Accuracy:	1/5 mile
UTM:	Zone-11 N3730352 E380142	Elevation (ft):	100
PLSS:	T05S, R13W, Sec. 30 (S)	Acres:	0.0

Location: POINT FERMIN, SAN PEDRO.

Detailed Location: A 1899 BRANDEGEE COLLECTION FROM "SAN PEDRO" ALSO ATTRIBUTED TO THIS SITE. A 1999 USFWS REPORT MENTIONS THAT THE PLANT WAS LAST COLLECTED HERE IN 1931; CNDDDB HAS NO INFORMATION TO SUPPORT THIS DATE.

Ecological:

General: SITE MAPPED ACCORDING TO TWO 1908 PEIRSON COLLECTIONS & A 1910 JOHNSON COLLECTION. FOTHERINGHAM UNABLE TO LOCATE IN 1997, PRESUMED EXTIRPATED. NEEDS FIELDWORK. INCLUDES FORMER OCCURRENCE #41.

Owner/Manager: UNKNOWN

Occurrence No.	2	Map Index: 34591	EO Index: 48785	Element Last Seen:	1884-07-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1994-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	2012-10-02

Quad Summary: San Pedro (3311863), Torrance (3311873)

County Summary: Los Angeles

Lat/Long:	33.74588 / -118.33602	Accuracy:	1 mile
UTM:	Zone-11 N3734781 E376250	Elevation (ft):	
PLSS:	T05S, R14W, Sec. 15 (S)	Acres:	0.0

Location: PALOS VERDES MT (=SAN PEDRO HILLS).

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AT SAN PEDRO HILL AND SURROUNDINGS BY CNDDDB.

Ecological:

General: TYPE LOCALITY. ONLY SOURCES OF INFORMATION FOR THIS OCCURRENCE ARE TWO 1884 LYON COLLECTIONS. THOMAS MENTIONS THAT HE SAW NO PLANTS IN THIS AREA IN 1989 OR 1994. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	7	Map Index:	39864	EO Index:	48741	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		Record Last Updated:	2002-09-06
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Long Beach (3311872), Torrance (3311873)

County Summary: Los Angeles, Pacific Ocean

Lat/Long: 33.79001 / -118.24785 **Accuracy:** 1 mile

UTM: Zone-11 N3739572 E384477 **Elevation (ft):**

PLSS: T04S, R13W, Sec. 33 (S) **Acres:** 0.0

Location: WILMINGTON.

Detailed Location:

Ecological:

General: LOCATION BASED UPON OLD (UNDATED) BRANDEGEE COLLECTION. POPULATION PRESUMABLY EXTIRPATED ACCORDING TO FOTHERINGHAM. HISTORIC SITE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Symphotrichum defoliatum</i>		Element Code: PDASTE80C0	
San Bernardino aster			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
Other:	Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive		
Habitat:	General:	MEADOWS AND SEEPS, CISMONTANE WOODLAND, COASTAL SCRUB, LOWER MONTANE CONIFEROUS FOREST, MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND.	
	Micro:	VERNALLY MESIC GRASSLAND OR NEAR DITCHES, STREAMS AND SPRINGS; DISTURBED AREAS. 3-2045 M.	

Occurrence No.	28	Map Index:	80779	EO Index:	60571	Element Last Seen:	1930-10-18
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1930-10-18	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-11-24	
Quad Summary:	Torrance (3311873)						
County Summary:	Los Angeles						
Lat/Long:	33.85124 / -118.27455		Accuracy:	1 mile			
UTM:	Zone-11 N3746393 E382089		Elevation (ft):				
PLSS:	T04S, R13W, Sec. 06 (S)		Acres:	0.0			
Location:	LAGUNA DOMINGUEZ, GARDENA.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB CENTERED ON HISTORIC LOCATION OF DOMINGUEZ SLOUGH ALSO KNOWN AS LAGUNA DOMINGUEZ. SLOUGH WAS PART OF HISTORICAL WATERSHED OF LOS ANGELES RIVER, NOW LONG GONE.						
Ecological:	DRY BOTTOM OF SLOUGH.						
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1930 FOSBERG COLLECTION.						
Owner/Manager:	UNKNOWN						

Occurrence No.	76	Map Index:	78718	EO Index:	79628	Element Last Seen:	1932-07-07
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1932-07-07	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-04-28	
Quad Summary:	Long Beach (3311872)						
County Summary:	Los Angeles						
Lat/Long:	33.78852 / -118.13883		Accuracy:	1/10 mile			
UTM:	Zone-11 N3739290 E394568		Elevation (ft):	20			
PLSS:	T04S, R12W, Sec. 33, NE (S)		Acres:	0.0			
Location:	BRYANT RANCH; BIXBY AVE, 1.3 MI W OF HANSEN RD, LONG BEACH.						
Detailed Location:	MAPPED BY CNDDB "~0.2 MI E OF SW CORNER OF NW1/4 OF NE1/4 OF SECTION 33" AS STATED ON COLLECTION LABEL; UNABLE TO LOCATE "BIXBY AVE" OR "HANSEN RD", THESE ROAD NAMES ARE FROM 1932 AND MAY NO LONGER EXIST.						
Ecological:	EDGE OF FIELD IN DRAINAGE DITCH.						
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1932 WOLF COLLECTION.						
Owner/Manager:	UNKNOWN						

<i>Dithyrea maritima</i>		Element Code: PDBRA10020	
beach spectaclepod			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G1
	State: Threatened		State: S1
Other:	Rare Plant Rank - 1B.1, SB_SBBG-Santa Barbara Botanic Garden		
Habitat:	General:	COASTAL DUNES, COASTAL SCRUB.	



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Micro: SEA SHORES, ON SAND DUNES, AND SANDY PLACES NEAR THE SHORE. 3-60 M.

Occurrence No.	2	Map Index:	01655	EO Index:	20545	Element Last Seen:	1902-05-25
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1998-07-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-08-07	

Quad Summary: Redondo Beach (3311874), Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.86695 / -118.40396	Accuracy:	1 mile
UTM:	Zone-11 N3748290 E370140	Elevation (ft):	20
PLSS:	T03S, R15W, Sec. 36 (S)	Acres:	0.0

Location: HERMOSA BEACH, 2 MILES NORTH OF REDONDO.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN GENERAL VICINITY OF HERMOSA BEACH. INCLUDES COLLECTIONS FROM "NEAR REDONDO," "REDONDO BEACH," AND "2 MILES NORTH OF REDONDO."

Ecological: SAND DUNES.

General: TYPE LOCALITY. OCCURRENCE IS BASED ON COLLECTIONS FROM 1892, 1894, 1898, 1899, & 1902. EXTIRPATED AT THIS SITE ACCORDING TO P. AIGNER; SURVEYED FROM PLAYA DEL REY TO PALOS VERDES PENINSULA IN 1998.

Owner/Manager: UNKNOWN

Occurrence No.	3	Map Index:	01557	EO Index:	20552	Element Last Seen:	1934-05-09
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1998-07-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-08-07	

Quad Summary: Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.91505 / -118.42810	Accuracy:	1 mile
UTM:	Zone-11 N3753655 E367981	Elevation (ft):	10
PLSS:	T03S, R15W, Sec. 14 (S)	Acres:	0.0

Location: EL SEGUNDO.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE GENERAL VICINITY OF EL SEGUNDO.

Ecological: IN ESTABLISHED SAND DUNES. NEAR STRAND.

General: COLLECTED HERE IN 1928, 1932, 1934. EXTIRPATED ACC TO AIGNER, SURVEYED FROM PLAYA DEL REY TO PALOS VERDES PENINSULA. ONLY POTENTIAL HABITAT REMAINING IS EL SEGUNDO BLUE BUTTERFLY PRESERVE AT LAX, NO ACCESS, NO PLANTS OBS THRU FENCE (1998).

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	4	Map Index: 23785	EO Index: 35194	Element Last Seen: 1903-04-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1903-04-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-11-17
Quad Summary:	Venice (3311884)			
County Summary:	Los Angeles, Pacific Ocean			
Lat/Long:	33.97291 / -118.44837		Accuracy: 1 mile	
UTM:	Zone-11 N3760097 E366198		Elevation (ft):	
PLSS:	T02S, R15W, Sec. 28 (S)		Acres: 0.0	
Location:	BALLONA, PLAYA DEL REY.			
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB IN THE VICINITY OF BALLONA MARSHES, NORTH OF PLAYA DEL REY.			
Ecological:				
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1903 COLLECTION BY BRAUNTON. NEEDS FIELDWORK.			
Owner/Manager:	UNKNOWN			

Occurrence No.	11	Map Index: 40194	EO Index: 35196	Element Last Seen: 1884-07-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1884-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-05-15
Quad Summary:	Venice (3311884), Beverly Hills (3411814), Topanga (3411815)			
County Summary:	Los Angeles, Pacific Ocean			
Lat/Long:	34.01281 / -118.49073		Accuracy: 1 mile	
UTM:	Zone-11 N3764578 E362349		Elevation (ft): 20	
PLSS:	T02S, R15W, Sec. 07 (S)		Acres: 0.0	
Location:	DUNES OF COAST NEAR SANTA MONICA.			
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB NEAR THE BEACHES WEST OF SANTA MONICA.			
Ecological:	COASTAL DUNES.			
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1884 LYON COLLECTION. NEEDS FIELDWORK.			
Owner/Manager:	UNKNOWN			

<i>Aphanisma blitoides</i>		Element Code: PDCHE02010	
aphanisma			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3G4
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2, SB_SBBG-Santa Barbara Botanic Garden		
Habitat:	General: COASTAL BLUFF SCRUB, COASTAL DUNES, COASTAL SCRUB.		
	Micro: ON BLUFFS AND SLOPES NEAR THE OCEAN IN SANDY OR CLAY SOILS. 3-305 M.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	1	Map Index: 37104	EO Index: 12882	Element Last Seen:	2015-01-09
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2015-01-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2016-05-31
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.72737 / -118.348		Accuracy:	specific area	
UTM:	Zone-11 N3732743 E375115		Elevation (ft):	100	
PLSS:	T05S, R14W, Sec. 21 (S)		Acres:	60.0	
Location:	PALOS VERDES PENINSULA; FROM NEAR PORTUGUESE BEND SOUTHWARD TO NEAR ROYAL PALMS BEACH PARK.				
Detailed Location:	SCATTERED COLONIES ALONG BLUFFS. MAPPED BY CNDDDB AS 4 POLYGONS. PORTION OF OCCURRENCE WITHIN OCEAN TRAILS RESERVE OWNED BY THE CITY OF RANCHO PALOS VERDES.				
Ecological:	COASTAL BLUFFS ABOVE STONY BEACH. STEEP TALUSED SLOPE WITH CISTANTHE MARITIMA, LYCIUM CALIFORNICUM, RHUS INTEGRIFOLIA, CALANDRINIA MARITIMA, DUDLEYA VIRENS, OPUNTIA LITTORALIS, O. PROLIFERA, MIRABILIS CALIFORNICA, ENCELIA CALIFORNICA, ETC.				
General:	ABOUT 60 PLANTS IN 1991, BUT ONLY PORTION OF OCC SURVEYED DUE TO INACCESSIBILITY. FOUND IN 1992 BY LSA; 150+ OBSERVED IN 1995. 1350+ PLANTS SEEN IN 2015. COLLECTED HERE IN 1994, 2001, AND 2010 (100 PLANTS IN 2010). INCLUDES FORMER OCC #2.				
Owner/Manager:	PVT, OTHERS				
Occurrence No.	5	Map Index: 17565	EO Index: 11724	Element Last Seen:	1930-04-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1930-04-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1991-10-07
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.77685 / -118.39592		Accuracy:	1 mile	
UTM:	Zone-11 N3738289 E370748		Elevation (ft):	1000	
PLSS:	T05S, R14W, Sec. 06 (S)		Acres:	0.0	
Location:	PALOS VERDES HILLS.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE VICINITY OF PALOS VERDES HILLS.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1930 CATEY COLLECTION. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	31	Map Index: 41675	EO Index: 41675	Element Last Seen:	2015-01-05
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2015-01-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2016-05-11

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles

Lat/Long:	33.73867 / -118.37326	Accuracy:	specific area
UTM:	Zone-11 N3734027 E372791	Elevation (ft):	100
PLSS:	T05S, R14W, Sec. 17, S (S)	Acres:	3.0

Location: ABALONE COVE NEAR PORTUGUESE POINT, PALOS VERDES PENINSULA.

Detailed Location: MAPPED AS 3 POLYGONS ACCORDING TO 2015 UELMAN COORDINATES.

Ecological: SOUTHERN CALIFORNIA COASTAL BLUFF SCRUB. ASSOCIATED WITH LYCIUM CALIFORNICUM, OPUNTIA ORICOLA, RHUS INTEGRIFOLIA, ENCELIA CALIFORNICA, AND DUDLEYA VIRENS SSP. INSULARIS. POPULATION ON LOOSE GRAVELLY ROCK.

General: 1 PLANT OBSERVED AT WEST END OF SITE IN 1992. IN 2015, WESTERN POLYGON HAD 150+ PLANTS, MIDDLE POLYGON HAD 5+ PLANTS, AND EASTERN POLYGON HAD 100+ PLANTS.

Owner/Manager: CITY OF RANCHO PALOS VERDES

Occurrence No.	47	Map Index: 75742	EO Index: 76611	Element Last Seen:	2005-04-08
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2005-04-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2016-05-11

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.7389 / -118.39989	Accuracy:	80 meters
UTM:	Zone-11 N3734087 E370324	Elevation (ft):	100
PLSS:	T05S, R15W, Sec. 13, SE (S)	Acres:	5.0

Location: PALOS VERDES PENINSULA; OLD MARINELAND SITE ON LONG POINT.

Detailed Location: ON LONG POINT AND BLUFFS TOWARD POINT VICENTE. MAPPED USING COORDINATES FROM 2005 SANDERS COLLECTION LABEL; DATUM AND PRECISION OF COORDINATES IS UNKNOWN, MAPPED CENTERED BETWEEN NAD 27 AND NAD 83.

Ecological: MOSTLY DISTURBED AREAS; ON SLOPES TOWARD POINT VICENTE, BUT ALSO IN NATIVE BLUFF SCRUB AND ROCKY STRAND. MANY ORNAMENTALS PERSISTING WITHOUT CARE SINCE 1987.

General: TWO SMALL DENSE COLONIES SEEN IN 2005. ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2005 SANDERS COLLECTION. NEEDS FIELDWORK.

Owner/Manager: PVT?



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	48	Map Index: 75744	EO Index: 76662	Element Last Seen:	2008-03-08
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2008-03-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-07-30
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.76341 / -118.41889		Accuracy:	80 meters	
UTM:	Zone-11 N3736828 E368600		Elevation (ft):	85	
PLSS:	T05S, R15W, Sec. 11, SE (S)		Acres:	0.0	
Location:	PALOS VERDES; PASEO DEL MAR & VIA NEVE.				
Detailed Location:	TRAILHEAD DOWN CLIFFSIDE, WHERE PASEO DEL MAR CROSSES VIA NEVE.				
Ecological:	COASTAL BLUFF SCRUB. CALANDRINIA MARITIMA AND ANTIRRHINUM NUTTALLIANUM ALSO AT THIS SITE.				
General:	8 PLANTS SEEN IN 2008.				
Owner/Manager:	CITY OF PALOS VERDES ESTATES				
Occurrence No.	49	Map Index: 01700	EO Index: 76663	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-07-03
Quad Summary:	Torrance (3311873), Redondo Beach (3311874)				
County Summary:	Los Angeles, Pacific Ocean				
Lat/Long:	33.82921 / -118.39056		Accuracy:	1 mile	
UTM:	Zone-11 N3744088 E371323		Elevation (ft):		
PLSS:	T04S, R14W, Sec. 18 (S)		Acres:	0.0	
Location:	REDONDO.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS IN THE VICINITY OF REDONDO BEACH, LOS ANGELES.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN UNDATED RUSSELL COLLECTION. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				
Occurrence No.	51	Map Index: 75752	EO Index: 76767	Element Last Seen:	2009-04-05
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-04-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-07-03
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.79697 / -118.40738		Accuracy:	1/10 mile	
UTM:	Zone-11 N3740535 E369717		Elevation (ft):	100	
PLSS:	T04S, R15W, Sec. 25, W (S)		Acres:	0.0	
Location:	FLAT ROCK POINT, PALOS VERDES ESTATES.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AT FLAT ROCK POINT.				
Ecological:	COASTAL BLUFF SCRUB.				
General:	~100 PLANTS IN 2009.				
Owner/Manager:	CITY OF PALOS VERDES ESTATES				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	76	Map Index:	A0142	EO Index:	101704	Element Last Seen:	2015-01-27
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		Record Last Updated:	2016-05-31
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.74151 / -118.38587	Accuracy:	specific area
UTM:	Zone-11 N3734359 E371626	Elevation (ft):	25
PLSS:	T05S, R14W, Sec. 18, S (S)	Acres:	2.0

Location: NW SIDE OF ABALONE COVE, BETWEEN LONG POINT AND PORTUGUESE POINT.

Detailed Location: MAPPED AS 3 POLYGONS ACCORDING TO 2015 UELMAN COORDINATES.

Ecological: SOUTHERN CALIFORNIA COASTAL BLUFF SCRUB. POPULATION ON LOOSE, GRAVELLY WEATHERED BASALT ROCK. DOMINANT SURROUNDING PLANTS WERE LYCIUM CALIFORNICUM, OPUNTIA ORICOLA, RHUS INTEGRIFOLIA, ENGELIA CALIFORNICA, AND DUDLEYA VIRENS SSP. INSULARIS.

General: IN 2015, POPULATION NUMBERS FROM WEST TO EAST WERE 10+ PLANTS, 100+ PLANTS, AND 10+ PLANTS.

Owner/Manager: CITY OF RANCHO PALOS VERDES

<i>Atriplex coulteri</i>		Element Code: PDCHE040E0
Coulter's saltbush		
Listing Status:	Federal: None	CNDDB Element Ranks: Global: G3
	State: None	State: S1S2
Other:	Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	
Habitat:	General: COASTAL BLUFF SCRUB, COASTAL DUNES, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.	
	Micro: OCEAN BLUFFS, RIDGETOPS, AS WELL AS ALKALINE LOW PLACES. ALKALINE OR CLAY SOILS. 2-460 M.	

Occurrence No.	56	Map Index:	23782	EO Index:	74608	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		Record Last Updated:	2009-02-18
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.83821 / -118.17658	Accuracy:	1 mile
UTM:	Zone-11 N3744839 E391136	Elevation (ft):	
PLSS:	T04S, R12W (S)	Acres:	0.0

Location: BIXBY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AT BIXBY KNOLLS.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS AN UNDATED COLLECTION BY BRANDEGEE.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	102	Map Index: 99025	EO Index: 100548	Element Last Seen:	2012-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2012-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2016-02-01
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.80247 / -118.39758		Accuracy:	specific area	
UTM:	Zone-11 N3741132 E370634		Elevation (ft):	10	
PLSS:	T04S, R15W, Sec. 25, NE (S)		Acres:	1.0	
Location:	PALOS VERDES ESTATES; MALAGA COVE IMMEDIATELY SW OF THE PALOS VERDES BEACH AND ATHLETIC CLUB.				
Detailed Location:	MAPPED ACCORDING TO 2012 GEORGE COORDINATES.				
Ecological:	JUST ABOVE HIGH TIDE LINE ON ROCKY BEACH CUT FROM STORM SURGE.				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2012 GEORGE COLLECTION.				
Owner/Manager:	CITY OF PALOS VERDES ESTATES				

Occurrence No.	103	Map Index: 99026	EO Index: 100549	Element Last Seen:	1902-05-15
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1902-05-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2016-02-02
Quad Summary:	Inglewood (3311883)				
County Summary:	Los Angeles				
Lat/Long:	33.89139 / -118.302		Accuracy:	1 mile	
UTM:	Zone-11 N3750876 E379607		Elevation (ft):		
PLSS:	T03S, R14W, Sec. 24 (S)		Acres:	1987.0	
Location:	GARDENA.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS AROUND THE GARDENA POST OFFICE.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1902 BRAUNTON COLLECTION. PRESUMED EXTIRPATED.				
Owner/Manager:	UNKNOWN				

<i>Atriplex pacifica</i>		Element Code: PDCHE041C0
south coast saltscale		
Listing Status:	Federal: None	CNDBB Element Ranks: Global: G4
	State: None	State: S2
	Other: Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	
Habitat:	General: COASTAL SCRUB, COASTAL BLUFF SCRUB, PLAYAS, COASTAL DUNES.	
	Micro: ALKALI SOILS. 1-400 M.	



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	3	Map Index: 34590	EO Index: 12350	Element Last Seen:	2006-XX-XX
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2006-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-11-15
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.72441 / -118.33673		Accuracy:	specific area	
UTM:	Zone-11 N3732402 E376155		Elevation (ft):	230	
PLSS:	T05S, R14W, Sec. 22, SW (S)		Acres:	6.0	
Location:	PALOS VERDES PENINSULA, WEST SLOPE OF SHORELINE PARK ALONG BEACH ACCESS TRAIL.				
Detailed Location:	2 POLYGONS MAPPED IN THE SW 1/4 OF SECTION 22 ACCORDING TO A 1992 MAP FROM BRINKMANN-BUSI AND DFW DIGITAL DATA. COLLECTIONS FROM SAN PEDRO AND SAN PEDRO HILLS FROM 1903, 1906, & 1931 ALSO ATTRIBUTED HERE.				
Ecological:	IN COASTAL SAGE SCRUB WITH NUMEROUS NON-NATIVE GRASSES.				
General:	24 PLANTS IN 1992; BRINKMANN-BUSI STATES THERE ARE FEWER PLANTS HERE THAN IN 1991, BUT NO DETAILS GIVEN FOR 1991. UNKNOWN NUMBER SEEN IN 2006. INCLUDES FORMER EO#S 4 & 7.				
Owner/Manager:	CITY OF RANCHO PALOS VERDES				
Occurrence No.	8	Map Index: 01700	EO Index: 759	Element Last Seen:	1903-10-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1903-10-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1996-02-12
Quad Summary:	Torrance (3311873), Redondo Beach (3311874)				
County Summary:	Los Angeles, Pacific Ocean				
Lat/Long:	33.82921 / -118.39056		Accuracy:	1 mile	
UTM:	Zone-11 N3744088 E371323		Elevation (ft):	12	
PLSS:	T04S, R14W, Sec. 18 (S)		Acres:	0.0	
Location:	REDONDO.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB IN VICINITY OF REDONDO BEACH.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1903 COLLECTION BY BRANDEGEE. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	119	Map Index: B1438	EO Index: 113346	Element Last Seen:	2014-12-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2014-12-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-11-19

Quad Summary: San Pedro (3311863), Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.74231 / -118.38025	Accuracy:	non-specific area
UTM:	Zone-11 N3734440 E372148	Elevation (ft):	35
PLSS:	T05S, R14W, Sec. 17, SW (S)	Acres:	64.0

Location: ABALONE COVE BLUFFS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS AROUND THE BLUFFS OF ABALONE COVE.

Ecological: EDGE OF BLUFF AND TERRACE TOP, ADJACENT TO A TRAIL.

General: ONLY SOURCES OF INFORMATION FOR THIS SITE ARE 2014 STEERS PHOTOS. "THIS SPECIMEN KEYED OUT TO A. PACIFICA. LEAF AND FRUIT SIZE WERE WELL UNDER RANGE FOR A. COULTERI. HOWEVER, THE BASE OF THIS SPECIMEN SEEMED WOODY...."

Owner/Manager: UNKNOWN

Occurrence No.	120	Map Index: B1439	EO Index: 113347	Element Last Seen:	2009-07-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-07-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-11-15

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles

Lat/Long:	33.73857 / -118.36262	Accuracy:	specific area
UTM:	Zone-11 N3734004 E373776	Elevation (ft):	50
PLSS:	T05S, R14W, Sec. 16, SW (S)	Acres:	10.0

Location: MOUTH OF PORTUGUESE CANYON AT PORTUGUESE BEND.

Detailed Location: MAPPED ACCORDING TO VEGETATION SURVEY COORDINATES, IN THE SW 1/4 OF THE SW 1/4 OF SECTION 16.

Ecological: ASSOCIATED WITH SALSOLA TRAGUS, BACCHARIS PILULARIS, CHRYSANTHEMUM CORONARIUM, ATRIPLEX LENTIFORMIS, BROMUS RUBENS, B. DIANDRUS, SCHINUS MOLLE, BRASSICA NIGRA, ACACIA CYCLOPS, MESEMBRYANTHEMUM CRYSTALLINUM, RICINUS COMMUNIS, ETC.

General: LESS THAN 1% COVER OF ATRIPLEX PACIFICA OBSERVED DURING 2009 VEGETATION SURVEYS.

Owner/Manager: CITY OF RANCHO PALOS VERDES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	121	Map Index: B1440	EO Index: 113348	Element Last Seen:	2009-03-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-03-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2018-11-15

Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				

Lat/Long:	33.74471 / -118.36056	Accuracy:	80 meters		
UTM:	Zone-11 N3734682 E373976	Elevation (ft):	345		
PLSS:	T05S, R14W, Sec. 16, NW (S)	Acres:	5.0		

Location:	EAST SIDE OF PORTUGUESE CANYON, APPROXIMATELY 0.75 AIR MILE NE OF INSPIRATION POINT.				
Detailed Location:	MAPPED ACCORDING TO VEGETATION SURVEY COORDINATES, IN THE SOUTH 1/2 OF THE NW 1/4 OF SECTION 16.				
Ecological:	ASSOCIATED WITH ATRIPLEX LENTIFORMIS, BROMUS DIANDRUS, HORDEUM VULGARE, MELILOTUS INDICUS, ACACIA CYCLOPS, ENCELIA CALIFORNICA, BRASSICA NIGRA, VICIA SATIVA, BACCHARIS PILULARIS, EUCALYPTUS, RHUS INTEGRIFOLIA, LIMONIUM PEREZII, ETC.				
General:	LESS THAN 1% COVER OF ATRIPLEX PACIFICA OBSERVED DURING 2009 VEGETATION SURVEYS.				
Owner/Manager:	CITY OF RANCHO PALOS VERDES				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Atriplex parishii</i>		Element Code: PDCHE041D0	
Parish's brittle scale			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1G2
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive		
Habitat:	General: VERNAL POOLS, CHENOPOD SCRUB, PLAYAS.		
	Micro: USUALLY ON DRYING ALKALI FLATS WITH FINE SOILS. 4-1420 M.		

Occurrence No.	5	Map Index: 23782	EO Index: 7795	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-08-28

Quad Summary: Long Beach (3311872)
County Summary: Los Angeles

Lat/Long:	33.83821 / -118.17658	Accuracy:	1 mile
UTM:	Zone-11 N3744839 E391136	Elevation (ft):	75
PLSS:	T04S, R12W (S)	Acres:	0.0

Location: BIXBY.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS ACCORDING TO INFO GIVEN BY BRAMLET: NEAR BIXBY KNOLLS, N OF LONG BEACH.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN UNDATED BRANDEGEE COLLECTION. BRAMLET BELIEVES THAT THE LONG BEACH AREA PROVIDED SUITABLE HABITAT FOR A. PARISHII IN THE PAST BUT THIS AREA IS NOW FULLY DEVELOPED.
Owner/Manager: UNKNOWN

Occurrence No.	9	Map Index: 01700	EO Index: 1401	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-08-28

Quad Summary: Torrance (3311873), Redondo Beach (3311874)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.82921 / -118.39056	Accuracy:	1 mile
UTM:	Zone-11 N3744088 E371323	Elevation (ft):	15
PLSS:	T04S, R14W, Sec. 18 (S)	Acres:	0.0

Location: REDONDO (BEACH?).
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AT REDONDO BEACH.
Ecological:
General: MAIN SOURCE OF LOCATION INFORMATION FOR THIS SITE IS AN UNDATED BRAUNTON COLLECTION. NEEDS FIELDWORK.
Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Atriplex serenana var. davidsonii</i>		Element Code: PDCHE041T1	
Davidson's saltscale			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
Habitat:	General: COASTAL BLUFF SCRUB, COASTAL SCRUB.		
	Micro: ALKALINE SOIL. 0-480 M.		

Occurrence No.	3	Map Index:	34592	EO Index:	253	Element Last Seen:	1906-06-02
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1906-06-02	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-01-16	
Quad Summary:	San Pedro (3311863), Torrance (3311873)						
County Summary:	Los Angeles, Pacific Ocean						
Lat/Long:	33.73644 / -118.28092		Accuracy:	1 mile			
UTM:	Zone-11 N3733670 E381341		Elevation (ft):				
PLSS:	T05S, R13W, Sec. 18 (S)		Acres:	0.0			
Location:	SAN PEDRO.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN GENERAL VICINITY OF SAN PEDRO.						
Ecological:							
General:	OCCURRENCE IS BASED ON A 1893 COLLECTION BY BRANDEGEE AND A 1906 COLLECTION BY EASTWOOD. A 1981 PARISH COLLECTION FROM LONG BEACH IS ALSO ATTRIBUTED TO THIS OCCURRENCE. NEEDS FIELDWORK.						
Owner/Manager:	UNKNOWN						

<i>Chenopodium littoreum</i>		Element Code: PDCHE091Z0	
coastal goosefoot			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.2		
Habitat:	General: COASTAL DUNES.		
	Micro: GENERALLY ON SANDY SOILS, AND ON DUNES. 5-40 M.		

Occurrence No.	1	Map Index:	83468	EO Index:	84489	Element Last Seen:	1904-05-14
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1904-05-14	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-10	
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.95590 / -118.44603		Accuracy:	3/5 mile			
UTM:	Zone-11 N3758208 E366387		Elevation (ft):				
PLSS:	T02S, R15W, Sec. 34 (S)		Acres:	0.0			
Location:	PLAYA DEL REY.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS CENTERED ON PLAYA DEL REY, SOUTH OF BALLONA CREEK.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION IS A 1904 GRANT COLLECTION.						
Owner/Manager:	UNKNOWN						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Suaeda esteroa</i>		Element Code: PDCHE0P0D0	
estuary seablite			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2		
Habitat:	General: MARSHES AND SWAMPS.		
	Micro: COASTAL SALT MARSHES IN CLAY, SILT, AND SAND SUBSTRATES. 0-80 M.		

Occurrence No.	17	Map Index:	34592	EO Index:	48871	Element Last Seen:	1904-09-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1904-09-06	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-11-10	
Quad Summary:	San Pedro (3311863), Torrance (3311873)						
County Summary:	Los Angeles, Pacific Ocean						
Lat/Long:	33.73644 / -118.28092		Accuracy:	1 mile			
UTM:	Zone-11 N3733670 E381341		Elevation (ft):				
PLSS:	T05S, R13W, Sec. 18 (S)		Acres:	0.0			
Location:	BORDERS OF THE BAY, SAN PEDRO.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN GENERAL VICINITY OF SAN PEDRO.						
Ecological:	BORDERS OF THE BAY.						
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1904 ABRAMS COLLECTION. POSSIBLY REFERENCING OCCURRENCES ON THE EAST SIDE OF SAN PEDRO BAY NEAR SEAL BEACH. NEEDS FIELDWORK.						
Owner/Manager:	UNKNOWN						

Occurrence No.	18	Map Index:	A2487	EO Index:	48872	Element Last Seen:	2006-01-21
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2006-01-21	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-11-04	
Quad Summary:	Long Beach (3311872)						
County Summary:	Los Angeles						
Lat/Long:	33.77163 / -118.13387		Accuracy:	1/5 mile			
UTM:	Zone-11 N3737413 E395008		Elevation (ft):	5			
PLSS:	T05S, R12W, Sec. 4, E (S)		Acres:	70.0			
Location:	BELMONT SHORES; COLORADO LAGOON IN VICINITY OF PARK AVENUE AND COLORADO STREET, CITY OF LONG BEACH.						
Detailed Location:	MAPPED BY CNDDB AS BEST GUESS AROUND THE COLORADO LAGOON.						
Ecological:	DISTURBED SALT MARSH IN SANDY SOIL.						
General:	SITE BASED ON A 2006 RIEFNER COLLECTION; MENTIONED AS "UNCOMMON." A 1900 JONES COLLECTION FROM LONG BEACH IS ALSO ATTRIBUTED TO THIS SITE.						
Owner/Manager:	CITY OF LONG BEACH						

<i>Dudleya virens ssp. insularis</i>		Element Code: PDCRA040S2	
island green dudleya			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3?T3
	State: None		State: S3
	Other: Rare Plant Rank - 1B.2		
Habitat:	General: COASTAL BLUFF SCRUB, COASTAL SCRUB.		
	Micro: ROCKY SOILS. 0-275 M.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	3	Map Index: 17598	EO Index: 47066	Element Last Seen:	2010-05-07
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-05-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-12-12
Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles				
Lat/Long:	33.72685 / -118.34605		Accuracy:	specific area	
UTM:	Zone-11 N3732683 E375293		Elevation (ft):	70	
PLSS:	T05S, R14W, Sec. 21 (S)		Acres:	55.0	
Location:	PALOS VERDES PENINSULA; FROM NEAR PORTUGUESE BEND SOUTHWARD TO NEAR ROYAL PALMS BEACH PARK.				
Detailed Location:	TWO POLYOGNS MAPPED ALONG COASTLINE ACCORDING TO A 1990 MAP BY BRINKMANN-BUSI AND A 1992 MAP FROM LSA ASSOCIATES.				
Ecological:	ROCKY OUTCROPS ON BLUFFS FACING THE OCEAN. ASSOC W/ APHANISMA BLITOIDES, CALANDRINIA MARITIMA, RHUS INTEGRIFOLIA, ENCELIA CALIFORNICA, OPUNTIA LITTORALIS, ISOCOMA/ERICAMERIA SP., MALACOTHRIX SAXATILIS, ERIOGONUM CINEREUM, AND LYCIUM CALIF.				
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1990, BUT BRINKMANN-BUSI REPORTED THAT THE BEST SITES ARE LOCATED WITHIN SAN PEDRO QUAD. 2010 SANDERS COLLECTION FROM E END OF OCCURRENCE REPORTS PLANTS AS "FAIRLY COMMON."				
Owner/Manager:	PVT, UNKNOWN				
Occurrence No.	4	Map Index: 17574	EO Index: 47067	Element Last Seen:	1990-XX-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	1990-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-12-12
Quad Summary:	Redondo Beach (3311874)				
County Summary:	Los Angeles				
Lat/Long:	33.74151 / -118.40606		Accuracy:	specific area	
UTM:	Zone-11 N3734384 E369756		Elevation (ft):	80	
PLSS:	T05S, R15W, Sec. 13 (S)		Acres:	16.0	
Location:	PALOS VERDES PENINSULA, FROM NEAR POINT VICENTE LIGHTHOUSE TO 0.5 MILE EAST OF POINT VICENTE.				
Detailed Location:	2 POLYGOONS MAPPED ALONG BLUFFS ACCORDING TO A 1990 MAP BY BRINKMANN-BUSI.				
Ecological:	ROCKY OUTCROPS ON BLUFFS FACING THE OCEAN. ALSO ALONG A ROADCUT GROWING WITH ERIOGONUM CINEREUM, ENCELIA CALIFORNICA, HAPLOPAPPUS VENETUS, ANNUAL GRASSES, STEPHANOMERIA VIRGATA, PENNISETUM SETACEUM, AND FOENICULUM VULGARE.				
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1990; "GOOD STAND" SEEN ALONG ROADCUT. SEVERAL HISTORIC COLLECTIONS FROM VICINITY OF POINT VICENTE FROM 1941, 1946, 1965, 1966, 1977, 1978, AND 1983 ARE ALSO ATTRIBUTED TO THIS OCCURRENCE.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	19	Map Index: 01943	EO Index: 47104	Element Last Seen:	1934-06-07
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1934-06-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2002-01-28

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.70639 / -118.29341	Accuracy:	1/5 mile
------------------	-----------------------	------------------	----------

UTM:	Zone-11 N3730352 E380142	Elevation (ft):	
-------------	--------------------------	------------------------	--

PLSS:	T05S, R13W, Sec. 30 (S)	Acres:	0.0
--------------	-------------------------	---------------	-----

Location: POINT FERMIN.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN GENERAL VICINITY OF POINT FERMIN.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1934 COLLECTION BY FERMIN. NEEDS FEILDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	20	Map Index: 47105	EO Index: 47105	Element Last Seen:	1946-06-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1946-06-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2002-01-28

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.71606 / -118.31613	Accuracy:	1/5 mile
------------------	-----------------------	------------------	----------

UTM:	Zone-11 N3731451 E378051	Elevation (ft):	
-------------	--------------------------	------------------------	--

PLSS:	T05S, R14W, Sec. 26 (S)	Acres:	0.0
--------------	-------------------------	---------------	-----

Location: WHITES POINT, WEST OF POINT FERMIN.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN GENERAL VICINITY OF WHITES POINT.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1946 COLLECTION BY WHITEHEAD. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Crossosoma californicum

Element Code: PDCRO02020

Catalina crossosoma

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3
	State: None		State: S3
	Other: Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
Habitat:	General: CHAPARRAL, COASTAL SCRUB.		
	Micro: ON ROCKY SEA BLUFFS, WOODED CANYONS, AND DRY, OPEN SUNNY SPOTS ON ROCKY CLAY. 5-535 M.		

Occurrence No.	19	Map Index:	58899	EO Index:	58935	Element Last Seen:	1996-03-01
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1996-03-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2019-09-16	

Quad Summary: San Pedro (3311863)
County Summary: Los Angeles

Lat/Long:	33.74457 / -118.35309	Accuracy:	80 meters
UTM:	Zone-11 N3734658 E374667	Elevation (ft):	580
PLSS:	T05S, R14W, Sec. 16, NE (S)	Acres:	0.0

Location: RANCHO PALOS VERDES; NEAR UPPER END OF KLONDIKE CANYON.
Detailed Location: EAST OF DRAINAGE. MAPPED IN THE SW 1/4 OF THE NE 1/4 OF SECTION 16 ACCORDING TO A 1996 MAP BY WOLF.
Ecological: RIPARIAN HABITAT. ASSOCIATED WITH RHUS INTEGRIFOLIA, DUDLEYA LANCEOLATA, AND GALIUM ANGUSTIFOLIUM.
General: 2 PLANTS OBSERVED IN 1996. A 1991 SEED COLLECTION FROM "PALOS VERDES PENINSULA, N OF PORTUGUESE BEND" IS ALSO ATTRIBUTED TO THIS OCCURRENCE.
Owner/Manager: CITY OF RANCHO PALOS VERDES

Occurrence No.	20	Map Index:	58910	EO Index:	58946	Element Last Seen:	2009-04-16
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-04-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2018-09-24	

Quad Summary: San Pedro (3311863)
County Summary: Los Angeles

Lat/Long:	33.74167 / -118.34163	Accuracy:	specific area
UTM:	Zone-11 N3734321 E375725	Elevation (ft):	1000
PLSS:	T05S, R14W, Sec. 15, SW (S)	Acres:	13.0

Location: FORRESTAL NATURE PRESERVE NEAR FORRESTAL QUARRY BOWL, ABOUT 0.6 AIR MILE NW OF MARYMOUNT COLLEGE, RANCHO PALOS VERDES.
Detailed Location: 3 POLYGONS MAPPED ACCORDING TO 1991 MAPS, LAT/LONG COORDINATES FROM 2004, AND VEGETATION SURVEY COORDINATES. WITHIN THE NORTH 1/2 OF THE SW 1/4 OF SECTION 15 AND THE EAST 1/2 OF THE SE 1/4 OF SECTION 16.
Ecological: COASTAL SAGE SCRUB ON N-FACING SLOPE AND N-FACING ROCK OUTCROP. ASSOCIATED WITH RHUS INTEGRIFOLIA, SALVIA MELLIFERA, ARTEMISIA CALIFORNICA, ERIOGONUM CINEREUM, ERIOPHYLLUM CONFERTIFLORUM, HETEROMELES ARBUTIFOLIA, GALIUM ANGUSTIFOLIUM, ETC.
General: SW POLY: 2 PLANTS IN 1984, 4 PLANTS IN 1991. CENTER POLY: 1 PLANT IN 2004, SEEN IN 2009. 800 PLANTS REPORTED FOR NE POLY IN 2004, THOUGH POP # SEEMS OVERLY LARGE FOR A CROSSOSOMA SITE. COLLECTED HERE IN 1977, 1979, 1994, 1996, & 1999.
Owner/Manager: CITY OF RPV, PVT



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Astragalus hornii</i> var. <i>hornii</i>		Element Code: PDFAB0F421	
Horn's milk-vetch			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: GUT1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1, BLM_S-Sensitive		
Habitat:	General: MEADOWS AND SEEPS, PLAYAS.		
	Micro: LAKE MARGINS, ALKALINE SITES. 75-350 M.		

Occurrence No.	28	Map Index: B4592	EO Index: 117528	Element Last Seen:	1896-07-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1896-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-12-19
Quad Summary:	Newport Beach (3311768), Anaheim (3311778), Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)				
County Summary:	Los Angeles, Orange				
Lat/Long:	33.78301 / -118.06702		Accuracy:	5 miles	
UTM:	Zone-11 N3738609 E401211		Elevation (ft):		
PLSS:	T04S, R11W, Sec. 31 (S)		Acres:	49683.0	
Location:	ALAMITOS RANCH.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AROUND THE AREA OF HISTORIC RANCHO LOS ALAMITOS AND LOS ALAMITOS. THE JEPSON MANUAL GIVES ELEVATION RANGE FOR THIS SPECIES AS 60-300 M BUT MAPPED AREA IS MUCH LOWER IN ELEVATION.				
Ecological:	ALKALI FLAT.				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1896 MCCLATCHIE COLLECTION.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Astragalus pycnostachyus var. lanosissimus</i>		Element Code: PDFAB0F7B1
Ventura Marsh milk-vetch		
Listing Status:	Federal: Endangered	CNDDDB Element Ranks: Global: G2T1
	State: Endangered	State: S1
Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	
Habitat:	General: MARSHES AND SWAMPS, COASTAL DUNES, COASTAL SCRUB.	
	Micro: WITHIN REACH OF HIGH TIDE OR PROTECTED BY BARRIER BEACHES, MORE RARELY NEAR SEEPS ON SANDY BLUFFS. 1-60 M.	

Occurrence No.	4	Map Index: 01453	EO Index: 19295	Element Last Seen: 1951-07-19
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1981-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2010-02-03
Quad Summary:	Venice (3311884), Beverly Hills (3411814)			
County Summary:	Los Angeles, Pacific Ocean			
Lat/Long:	33.98612 / -118.45702	Accuracy:	1 mile	
UTM:	Zone-11 N3761573 E365419	Elevation (ft):	5	
PLSS:	T02S, R15W, Sec. 21 (S)	Acres:	0.0	
Location:	BALLONA MARSHES AND RANCHO.			
Detailed Location:	VICINITY IS PRESENTLY MARINA DEL REY & THE SOUTH PART OF VENICE. THIS SITE INCLUDES COLLECTIONS FROM "BALLONA HARBOR", "PLAYA DEL REY", "NEAR PALMS", & COLLECTIONS FROM THE GENERAL VICINITY OF "LOS ANGELES COUNTY".			
Ecological:				
General:	VARIOUS COLLECTIONS MADE BETWEEN 1888 AND 1951 ARE ATTRIBUTED TO THIS SITE. AREA SEARCHED BY BARNEBY (1964) AND SCHREIBER (1981); HISTORIC POPULATIONS ARE PRESUMED EXTIRPATED.			
Owner/Manager:	UNKNOWN			



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Astragalus tener var. titi</i>		Element Code: PDFAB0F8R2	
coastal dunes milk-vetch			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G2T1
	State: Endangered		State: S1
	Other: Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
Habitat:	General: COASTAL BLUFF SCRUB, COASTAL DUNES, COASTAL PRAIRIE.		
	Micro: MOIST, SANDY DEPRESSIONS OF BLUFFS OR DUNES ALONG AND NEAR THE PACIFIC OCEAN; ONE SITE ON A CLAY TERRACE. 1-45 M.		

Occurrence No.	4	Map Index:	23784	EO Index:	42744	Element Last Seen:	1903-04-12
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:			1903-04-12
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2017-02-22

Quad Summary:	Inglewood (3311883)
County Summary:	Los Angeles

Lat/Long:	33.98167 / -118.33078	Accuracy:	1 mile
UTM:	Zone-11 N3760921 E377074	Elevation (ft):	
PLSS:	T02S, R14W, Sec. 22 (S)	Acres:	0.0

Location:	NEAR HYDE PARK.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED IN THE GENERAL VICINITY OF HYDE PARK.
Ecological:	LOW GROUND.
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1903 ABRAMS COLLECTION. BARNEBY (1964) BELIEVES THIS SITE IS PROBABLY EXTIRPATED.
Owner/Manager:	UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Nama stenocarpa</i>		Element Code: PDHYD0A0H0	
mud nama			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4G5
	State: None		State: S1S2
	Other: Rare Plant Rank - 2B.2		
Habitat:	General: MARSHES AND SWAMPS.		
	Micro: LAKE SHORES, RIVER BANKS, INTERMITTENTLY WET AREAS. 15-815 M.		

Occurrence No.	21	Map Index:	80349	EO Index:	81336	Element Last Seen:	1924-07-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1924-07-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2010-10-11		
Quad Summary:	Torrance (3311873)						
County Summary:	Los Angeles						
Lat/Long:	33.78887 / -118.28864		Accuracy:	4/5 mile			
UTM:	Zone-11 N3739493 E380698		Elevation (ft):				
PLSS:	T04S, R13W, Sec. 31 (S)		Acres:	0.0			
Location:	BIXBY SLOUGH.						
Detailed Location:	BIXBY SLOUGH IS NOW HARBOR REGIONAL PARK. MAPPED BY CNDDB AS BEST GUESS IN THE VICINITY OF HARBOR LAKE AND SURROUNDING MARSH AREAS.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1924 DAVIDSON COLLECTION. NEEDS FIELDWORK.						
Owner/Manager:	UNKNOWN						

<i>Phacelia stellaris</i>		Element Code: PDHYD0C510	
Brand's star phacelia			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
Habitat:	General: COASTAL SCRUB, COASTAL DUNES.		
	Micro: OPEN AREAS. 3-370 M.		

Occurrence No.	2	Map Index:	83468	EO Index:	8663	Element Last Seen:	1909-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1909-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2013-09-17		
Quad Summary:	Venice (3311884)						
County Summary:	Los Angeles						
Lat/Long:	33.95590 / -118.44603		Accuracy:	3/5 mile			
UTM:	Zone-11 N3758208 E366387		Elevation (ft):				
PLSS:	T02S, R15W, Sec. 34 (S)		Acres:	0.0			
Location:	PLAYA DEL REY.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS CENTERED ON PLAYA DEL REY, SOUTH OF BALLONA CREEK.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1909 COLLECTION BY DAVIDSON. NEEDS FIELDWORK.						
Owner/Manager:	UNKNOWN						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	3	Map Index: 90351	EO Index: 1726	Element Last Seen: 1923-03-19
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1923-03-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2013-09-17

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.91037 / -118.14066	Accuracy:	1/5 mile
UTM:	Zone-11 N3752804 E394548	Elevation (ft):	90
PLSS:	T03S, R12W, Sec. 16, E (S)	Acres:	0.0

Location: DOWNEY CEMETERY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB IN THE VICINITY OF THE OLD DOWNEY CEMETERY.

Ecological: SANDY SOIL.

General: ONLY SOURCES OF INFORMATION FOR THIS OCCURRENCE ARE TWO 1923 COLLECTIONS BY MOSKEDAHL AND MUNZ. REISER SUGGESTS THAT THIS POPULATION IS NO LONGER EXTANT (1994).

Owner/Manager: UNKNOWN

Occurrence No.	4	Map Index: 01700	EO Index: 757	Element Last Seen: 1897-03-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1897-03-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2013-09-26

Quad Summary: Torrance (3311873), Redondo Beach (3311874)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.82921 / -118.39056	Accuracy:	1 mile
UTM:	Zone-11 N3744088 E371323	Elevation (ft):	50
PLSS:	T04S, R14W, Sec. 18 (S)	Acres:	0.0

Location: NEAR REDONDO.

Detailed Location: EXACT LOCATION UNKNOWN. ORIGINAL LABEL CITES "NEAR RIDONDO," MAPPED AS BEST GUESS BY CNDDDB NEAR PRESENT-DAY REDONDO BEACH.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS AN 1897 COLLECTION BY MCCLATCHIE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	15	Map Index: 01557	EO Index: 91447	Element Last Seen: 1932-04-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1932-04-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2013-09-18

Quad Summary: Venice (3311884)

County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.91505 / -118.42810	Accuracy:	1 mile
UTM:	Zone-11 N3753655 E367981	Elevation (ft):	
PLSS:	T03S, R15W, Sec. 14 (S)	Acres:	0.0

Location: EL SEGUNDO.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE GENERAL VICINITY OF EL SEGUNDO.

Ecological: SAND DUNES, NEAR STRAND.

General: ONLY SOURCES OF INFORMATION FOR THIS OCCURRENCE ARE A 1931 COLLECTION BY BAUER AND A 1932 COLLECTION BY REMPEL. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Sidalcea neomexicana</i>		Element Code: PDMAL110J0	
salt spring checkerbloom			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4
	State: None		State: S2
	Other: Rare Plant Rank - 2B.2, USFS_S-Sensitive		
Habitat:	General: PLAYAS, CHAPARRAL, COASTAL SCRUB, LOWER MONTANE CONIFEROUS FOREST, MOJAVEAN DESERT SCRUB.		
	Micro: ALKALI SPRINGS AND MARSHES. 3-2380 M.		

Occurrence No.	27	Map Index: A3696	EO Index: 105338	Element Last Seen:	1922-05-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1922-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2017-02-09
Quad Summary:	Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)				
County Summary:	Los Angeles				
Lat/Long:	34.01264 / -118.37575		Accuracy:	1 mile	
UTM:	Zone-11 N3764410 E372967		Elevation (ft):		
PLSS:	T02S, R14W, Sec. 8 (S)		Acres:	1987.0	
Location:	BETWEEN W ADAMS AND CULVER CITY.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB AROUND HILLS JUST EAST OF CULVER CITY AND SOUTH OF THE WEST END OF WEST ADAMS STREET.				
Ecological:	HILLSIDE.				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1922 MOREY COLLECTION. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				

<i>Chorizanthe parryi var. fernandina</i>		Element Code: PDPGN040J1	
San Fernando Valley spineflower			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2T1
	State: Endangered		State: S1
	Other: Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.		
	Micro: SANDY SOILS. 15-1015 M.		

Occurrence No.	9	Map Index: 23785	EO Index: 41266	Element Last Seen:	1901-04-01
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1901-04-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2008-09-29
Quad Summary:	Venice (3311884)				
County Summary:	Los Angeles, Pacific Ocean				
Lat/Long:	33.97291 / -118.44837		Accuracy:	1 mile	
UTM:	Zone-11 N3760097 E366198		Elevation (ft):	50	
PLSS:	T02S, R15W, Sec. 28 (S)		Acres:	0.0	
Location:	BALLONA HARBOR.				
Detailed Location:	MAPPED IN VICINITY OF THE MOUTH OF BALLONA CREEK & MARINA DEL REY.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1901 COLLECTION BY ABRAMS. NEEDS FIELDWORK.				
Owner/Manager:	DFG-BALLONA WETLANDS ER, PVT				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Nemacaulis denudata var. denudata</i>		Element Code: PDPGN0G011	
coast woolly-heads			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3G4T2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank		
Habitat:	General: COASTAL DUNES.		
	Micro: 0-5 M.		

Occurrence No.	19	Map Index: 86418	EO Index: 1006	Element Last Seen:	1951-08-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1951-08-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-07-31

Quad Summary:	Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)				
County Summary:	Los Angeles, Orange				
Lat/Long:	33.74819 / -118.11288	Accuracy:	1 mile		
UTM:	Zone-11 N3734792 E396922	Elevation (ft):			
PLSS:	T05S, R12W, Sec. 14 (S)	Acres:	0.0		

Location: SEAL BEACH AND ALAMITOS, LONG BEACH.

Detailed Location: EXACT LOCATIONS UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB TO INCLUDE GENERAL VICINITIES OF SEAL BEACH AND ALAMITOS BAY/PENINSULA. COLLECTION FROM ANAHEIM LANDING ALSO ATTRIBUTED HERE; FORMER ANAHEIM LANDING LOCATED IN CURRENT SEAL BEACH.

Ecological:

General: OCCURRENCE IS PRIMARILY BASED ON A 1901 ABRAMS COLLECTION, A 1925 JONES COLLECTION, AND A 1951 PEIRSON COLLECTION. GENERAL COLLECTIONS FROM LONG BEACH FROM 1891, 1896, AND 1900 ARE ALSO ATTRIBUTED TO THIS OCCURRENCE. INCLUDES FORMER EO #22.

Owner/Manager: UNKNOWN

Occurrence No.	21	Map Index: 27996	EO Index: 22217	Element Last Seen:	1905-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1905-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1996-06-11

Quad Summary:	San Pedro (3311863)				
County Summary:	Los Angeles, Pacific Ocean				
Lat/Long:	33.74045 / -118.26454	Accuracy:	3/5 mile		
UTM:	Zone-11 N3734096 E382864	Elevation (ft):	20		
PLSS:	T05S, R13W (S)	Acres:	0.0		

Location: EAST SAN PEDRO, TERMINAL ISLAND.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB IN GENERAL VICINITY OF EAST SAN PEDRO ON TERMINAL ISLAND.

Ecological: SANDY SEA BEACHES.

General: OCCURRENCE IS BASED ON A 1898 GRANT COLLECTION FROM EAST SAN PEDRO AND A 1901-1905 GRANT COLLECTION FROM TERMINAL ISLAND. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Navarretia fossalis		Element Code: PDPLM0C080	
spreading navarretia			
Listing Status:	Federal: Threatened	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank		
Habitat:	General: VERNAL POOLS, CHENOPOD SCRUB, MARSHES AND SWAMPS, PLAYAS.		
	Micro: SAN DIEGO HARDPAN AND SAN DIEGO CLAYPAN VERNAL POOLS; IN SWALES & VERNAL POOLS, OFTEN SURROUDED BY OTHER HABITAT TYPES. 15-850 M.		

Occurrence No.	40	Map Index:	28742	EO Index:	47436	Element Last Seen:	1906-07-19
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1906-07-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2002-03-15		

Quad Summary: Inglewood (3311883)
County Summary: Los Angeles

Lat/Long:	33.95930 / -118.35104	Accuracy:	1 mile
UTM:	Zone-11 N3758465 E375170	Elevation (ft):	
PLSS:	T02S, R14W (S)	Acres:	0.0

Location: SINK NEAR INGLEWOOD.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS IN GENERAL VICINITY OF INGLEWOOD.
Ecological: IN SINK.
General: ONLY SOURCE OF INFO FOR THIS SITE IS A 1906 COLLECTION BY PEIRSON, LISTED IN BOYD'S ARTICLE. MUCH OF AREA IS NOW DEVELOPED. SITE IS EXTIRPATED ACCORDING TO BOYD. THIS LOCATION IS ABOUT 75 KM WEST OF THE NEAREST RIVERSIDE COUNTY SITE.
Owner/Manager: UNKNOWN

Navarretia prostrata		Element Code: PDPLM0C0Q0	
prostrate vernal pool navarretia			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
Other:	Rare Plant Rank - 1B.2		
Habitat:	General: COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, MEADOWS AND SEEPS.		
	Micro: ALKALINE SOILS IN GRASSLAND, OR IN VERNAL POOLS. MESIC, ALKALINE SITES. 3-1235 M.		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	10	Map Index: 39864	EO Index: 47944	Element Last Seen: 1882-05-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1882-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-02-11
Quad Summary:	Long Beach (3311872), Torrance (3311873)			
County Summary:	Los Angeles, Pacific Ocean			
Lat/Long:	33.79001 / -118.24785		Accuracy: 1 mile	
UTM:	Zone-11 N3739572 E384477		Elevation (ft):	
PLSS:	T04S, R13W, Sec. 33 (S)		Acres: 0.0	
Location:	WILMINGTON.			
Detailed Location:				
Ecological:				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1882 NEVIN COLLECTION. NEEDS FIELDWORK.			
Owner/Manager:	UNKNOWN			
Occurrence No.	11	Map Index: 26503	EO Index: 47952	Element Last Seen: 1895-05-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1895-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-02-11
Quad Summary:	Whittier (3311881), South Gate (3311882)			
County Summary:	Los Angeles			
Lat/Long:	33.94216 / -118.13586		Accuracy: 1 mile	
UTM:	Zone-11 N3756324 E395032		Elevation (ft):	
PLSS:	T03S, R12W (S)		Acres: 0.0	
Location:	DOWNEY.			
Detailed Location:				
Ecological:				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1895 DAVIDSON COLLECTION. NEEDS FIELDWORK.			
Owner/Manager:	UNKNOWN			
Occurrence No.	12	Map Index: 01965	EO Index: 47953	Element Last Seen: 1882-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1882-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-02-11
Quad Summary:	South Gate (3311882)			
County Summary:	Los Angeles			
Lat/Long:	33.90327 / -118.22273		Accuracy: 1 mile	
UTM:	Zone-11 N3752103 E386952		Elevation (ft):	
PLSS:	T03S, R13W, Sec. 15 (S)		Acres: 0.0	
Location:	COMPTON.			
Detailed Location:				
Ecological:				
General:	OCCURRENCE IS BASED ON NEVIN COLLECTIONS FROM 1881, 1882, AND THE 1900S (DATE GIVEN AS 190_ BUT MAY HAVE ALSO BEEN FROM THE 1880S). NEEDS FIELDWORK.			
Owner/Manager:	UNKNOWN			



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	13	Map Index: 83433	EO Index: 47954	Element Last Seen: 1963-05-08
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1963-05-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-02-11

Quad Summary: Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.90781 / -118.31103	Accuracy:	1 mile
UTM:	Zone-11 N3752708 E378793	Elevation (ft):	40
PLSS:	T03S, R14W, Sec. 14 (S)	Acres:	0.0

Location: JUNCTION OF WESTERN AVE WITH ROSECRANS AVE AND WESTERN AVE WITH 131ST ST, NORTH OF GARDENA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS TO ENCOMPASS LOCATIONS FROM TWO COLLECTIONS: "WESTERN AVE AT 131ST STREET" (GOULD 1944) AND "ROSECRANS AVE JUST WEST OF ITS JUNCTION WITH WESTERN AVE" (CRAMPTON 1963).

Ecological: IN GRASSY MEADOW, IN ADOBE SOIL. APPARENTLY USED TO BE BOGGY IN EARLY SPRING.

General: SITE BASED ON 1944 AND 1963 COLLECTIONS. A VAGUE 1917 JOHNSTON COLLECTION FROM "NEAR GARDENA, [DOMINQUEZ] SLOUGH" ALSO ATTRIBUTED TO THIS SITE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	14	Map Index: 47545	EO Index: 47955	Element Last Seen: 1944-04-15
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1944-04-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-02-11

Quad Summary: Venice (3311884)

County Summary: Los Angeles

Lat/Long:	33.90242 / -118.39629	Accuracy:	3/5 mile
UTM:	Zone-11 N3752214 E370902	Elevation (ft):	100
PLSS:	T03S, R14W, Sec. 19 (S)	Acres:	0.0

Location: NEAR JUNCTION OF SEPULVEDA BOULEVARD AND WEST RAILROAD, MANHATTAN BEACH VICINITY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB IN VICINITY OF SEPULVEDA BLVD WHERE IT INTERSECTS TWO RAILROAD LINES, JUST NORTH OF MANHATTAN BEACH.

Ecological: ON MARGIN OF VERNAL POOL.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1944 GOULD COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	33	Map Index: 28742	EO Index: 83691	Element Last Seen: 1906-07-19
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1906-07-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2015-02-11

Quad Summary: Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.95930 / -118.35104	Accuracy:	1 mile
UTM:	Zone-11 N3758465 E375170	Elevation (ft):	
PLSS:	T02S, R14W (S)	Acres:	0.0

Location: SINK NEAR INGLEWOOD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AROUND INGLEWOOD.

Ecological:

General: SITE IS BASED ON AN 1899 ABRAMS COLLECTION AND A 1906 PEIRSON COLLECTION.

Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



<i>Horkelia cuneata var. puberula</i>		Element Code: PDROS0W045	
mesa horkelia			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4T1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1, USFS_S-Sensitive		
Habitat:	General: CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB.		
	Micro: SANDY OR GRAVELLY SITES. 15-1645 M.		

Occurrence No.	67	Map Index:	17565	EO Index:	100201	Element Last Seen:	1931-03-26
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1931-03-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-01-20	

Quad Summary: Redondo Beach (3311874)
County Summary: Los Angeles

Lat/Long:	33.77685 / -118.39592	Accuracy:	1 mile
UTM:	Zone-11 N3738289 E370748	Elevation (ft):	
PLSS:	T05S, R14W, Sec. 06 (S)	Acres:	0.0

Location: PALOS VERDE HILLS.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS A BEST GUESS.
Ecological: HILLSIDE.
General: SITE BASED ON TWO 1931 PURER COLLECTIONS.
Owner/Manager: UNKNOWN

Occurrence No.	68	Map Index:	01557	EO Index:	100202	Element Last Seen:	1932-04-24
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1932-04-24	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-01-28	

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.91505 / -118.42810	Accuracy:	1 mile
UTM:	Zone-11 N3753655 E367981	Elevation (ft):	
PLSS:	T03S, R15W, Sec. 14 (S)	Acres:	0.0

Location: EL SEGUNDO.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS A BEST GUESS.
Ecological: SAND DUNES, ESTABLISHED PORTION OF LEE SLOPE.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1932 REMPEL COLLECTION.
Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Potentilla multijuga		Element Code: PDROS1B120	
Ballona cinquefoil			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: GX
	State: None		State: SX
	Other: Rare Plant Rank - 1A		
Habitat:	General: MEADOWS AND SEEPS.		
	Micro: BRACKISH MEADOWS. 0-2 M.		

Occurrence No.	1	Map Index: 23785	EO Index: 14622	Element Last Seen:	1890-08-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1890-08-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1996-01-11

Quad Summary: Venice (3311884)
County Summary: Los Angeles, Pacific Ocean

Lat/Long:	33.97291 / -118.44837	Accuracy:	1 mile
UTM:	Zone-11 N3760097 E366198	Elevation (ft):	5
PLSS:	T02S, R15W, Sec. 28 (S)	Acres:	0.0

Location: FLATS NEAR BALLONA (PRESENT DAY VENICE).
Detailed Location: BALLONA WAS NAME OF SPANISH LAND GRANT AND EXTENSIVE MARSH, NOW DESTROYED.
Ecological: HABITAT REPORTED BY MUNZ (1959) AS BRACKISH MEADOW IN COASTAL SAGE SCRUB.
General: TYPE LOCALITY.
Owner/Manager: DFG-BALLONA WETLANDS ER, PVT

Chloropyron maritimum ssp. maritimum		Element Code: PDSCR0J0C2	
salt marsh bird's-beak			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G4?T1
	State: Endangered		State: S1
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, SB_SBBG-Santa Barbara Botanic Garden		
Habitat:	General: MARSHES AND SWAMPS, COASTAL DUNES.		
	Micro: LIMITED TO THE HIGHER ZONES OF SALT MARSH HABITAT. 0-10 M.		

Occurrence No.	12	Map Index: 35371	EO Index: 34952	Element Last Seen:	1932-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1932-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-08-18

Quad Summary: Long Beach (3311872)
County Summary: Los Angeles

Lat/Long:	33.78593 / -118.18194	Accuracy:	non-specific area
UTM:	Zone-11 N3739048 E390574	Elevation (ft):	10
PLSS:	T04S, R12W, Sec. 31 (S)	Acres:	184.7

Location: LONG BEACH.
Detailed Location: MAPPED BY CNDDB ACCORDING TO THE TRS INFORMATION ON SNOW HERBARIUM LABEL AROUND THE NW1/4 OF SECTION 31.
Ecological: SALT MARSH.
General: SITE BASED ON A 1932 SNOW COLLECTION. AN 1896 MCCLATCHE AND AN 1893 DAVY COLLECTION FROM "LONG BEACH" ALSO ATTRIBUTED TO THIS SITE.
Owner/Manager: UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	13	Map Index:	26479	EO Index:	6167	Element Last Seen:	1901-05-25
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:	1980-XX-XX	Record Last Updated:	1995-05-18
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	San Pedro (3311863), Long Beach (3311872), Torrance (3311873)						
County Summary:	Los Angeles, Pacific Ocean						
Lat/Long:	33.75713 / -118.23704		Accuracy:	1 mile			
UTM:	Zone-11 N3735914 E385434		Elevation (ft):	5			
PLSS:	T05S, R13W (S)		Acres:	0.0			
Location:	TERMINAL ISLAND, SAN PEDRO HARBOR.						
Detailed Location:							
Ecological:	SALINE MEADOWS.						
General:	SITE KNOWN FROM 1901 COLLECTION BY GRANT. NO PLANTS SEEN IN 1980; SPECIES IS PRESUMED EXTIRPATED AT THIS SITE (FOX AND KNUDSEN, 1982).						
Owner/Manager:	UNKNOWN						

Occurrence No.	50	Map Index:	A4685	EO Index:	106381	Element Last Seen:	1901-06-06
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:	1901-06-06	Record Last Updated:	2017-05-16
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Venice (3311884), Beverly Hills (3411814)						
County Summary:	Los Angeles						
Lat/Long:	33.98812 / -118.40409		Accuracy:	1 mile			
UTM:	Zone-11 N3761727 E370312		Elevation (ft):				
PLSS:	T02S, R15W, Sec. 24 (S)		Acres:	1987.0			
Location:	MESMER, EASTERN PORTION OF THE BALLONA WETLANDS.						
Detailed Location:	MAPPED BY CNDDDB AS BEST GUESS AROUND MESMER AVENUE AND BALLONA CREEK.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1901 ABRAMS COLLECTION.						
Owner/Manager:	UNKNOWN						

<i>Lycium brevipes var. hassei</i>			Element Code: PDSOLOG0N0				
Santa Catalina Island desert-thorn							
Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G5T1Q		
	State:	None		State:	S1		
	Other:	Rare Plant Rank - 3.1					
Habitat:	General:	COASTAL BLUFF SCRUB, COASTAL SCRUB.					
	Micro:	COASTAL BLUFFS AND SLOPES. 30-95 M.					



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	4	Map Index: 55709	EO Index: 55725	Element Last Seen:	2014-08-01
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2014-08-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2016-05-10

Quad Summary: San Pedro (3311863)

County Summary: Los Angeles

Lat/Long:	33.73791 / -118.37479	Accuracy:	specific area
UTM:	Zone-11 N3733945 E372648	Elevation (ft):	100
PLSS:	T05S, R14W, Sec. 17 (S)	Acres:	3.0

Location: ON TOP (EDGE) OF PORTUGUESE POINT, ABALONE COVE SHORELINE PARK, RANCHO PALOS VERDES.

Detailed Location: ALONG WEST EDGE AND SOUTH END OF POINT. MAPPED ACCORDING TO A 1992 MAP BY BRINKMANN-BUSI. 2014 VANDERHOFF PHOTO FROM "PORTUGUESE POINT" ATTRIBUTED TO THIS SITE.

Ecological: ADJACENT SLOPE BELOW HAS COASTAL SAGE SCRUB COMMUNITY, WHILE MOST OF THE VEGETATION ON TOP CONSISTS OF NON-NATIVE ANNUAL GRASSES AND MUSTARDS WITH PATCHES OF SAGE SCRUB.

General: 50-75 PLANTS SEEN IN 1992, FORMING A DENSE 1 M TALL THICKET. FIRST DISCOVERED IN 1976 BY SANDERS. BRINKMANN-BUSI OBSERVATIONS FROM 1991 & 1995 ALSO ATTRIB HERE. SANDERS STATES THAT THIS APPEARS TO BE A NATURAL, NOT CULTIVATED, POPULATION.

Owner/Manager: CITY OF RANCHO PALOS VERDES

Occurrence No.	6	Map Index: 99959	EO Index: 101506	Element Last Seen:	2018-03-04
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2018-03-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2019-01-04

Quad Summary: Redondo Beach (3311874)

County Summary: Los Angeles

Lat/Long:	33.79026 / -118.40719	Accuracy:	specific area
UTM:	Zone-11 N3739791 E369725	Elevation (ft):	300
PLSS:	T04S, R15W, Sec. 36, N (S)	Acres:	2.0

Location: BLUFF COVE; NEAR INTERSECTION OF PASEO DEL MAR AND PALOS VERDES DR AND TO THE EAST, PALOS VERDES PENINSULA.

Detailed Location: MAPPED AS 3 POLYGONS FROM 2011 AND 2013 RIEFNER COORDINATES, AND 2018 VANDERHOFF COORDINATES, IN THE NORTH HALF OF SECTION 36.

Ecological: ON BLUFF-TOP AND ALONG TRAIL IN COASTAL BLUFF SCRUB.

General: WEST POLYGON: 2 THICKET-FORMING SHRUBS OBSERVED IN 2011. MIDDLE POLYGON: "LOCALLY COMMON" IN 2010, 10 PLANTS OBSERVED IN 2013. EAST POLYGON: 1 PLANT AT EDGE OF TRAIL OBSERVED IN 2018.

Owner/Manager: CITY OF PALOS VERDES ESTATES



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.:	7	Map Index:	B1772	EO Index:	113687	Element Last Seen:	2009-02-27
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-02-27	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2019-01-02	
Quad Summary:	Redondo Beach (3311874)						
County Summary:	Los Angeles						
Lat/Long:	33.74098 / -118.40305		Accuracy:	80 meters			
UTM:	Zone-11 N3734321 E370035		Elevation (ft):	50			
PLSS:	T05S, R15W, Sec. 13, S (S)		Acres:	5.0			
Location:	PELICAN COVE, JUST EAST OF POINT VICENTE						
Detailed Location:	MAPPED ACCORDING TO VEGETATION SURVEY COORDINATES.						
Ecological:							
General:	22% COVER OF LYCIUM BREVIPES VAR. HASSEI IN 2009.						
Owner/Manager:	CITY OF RANCHO PALOS VERDES						

<i>Orcuttia californica</i>		Element Code: PMPOA4G010					
California Orcutt grass							
Listing Status:	Federal:	Endangered	CNDDB Element Ranks:	Global:	G1		
	State:	Endangered		State:	S1		
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank					
Habitat:	General:	VERNAL POOLS.					
	Micro:	10-660 M.					

Occurrence No.:	12	Map Index:	01899	EO Index:	22413	Element Last Seen:	1946-06-11
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1976-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2016-02-05	
Quad Summary:	Inglewood (3311883)						
County Summary:	Los Angeles						
Lat/Long:	33.9073 / -118.3141		Accuracy:	2/5 mile			
UTM:	Zone-11 N3752655 E378510		Elevation (ft):				
PLSS:	T03S, R14W, Sec. 14 (S)		Acres:	280.0			
Location:	DRY DITCHES AROUND OLD MUNICIPAL AIRPORT, JUNCTION OF WESTERN AVE & ROSECRANS AVE, LOS ANGELES.						
Detailed Location:	MAPPED AS BEST GUESS AROUND THE HISTORIC GARDENA VALLEY AIRPORT JUST NW OF THE JUNCTION OF WESTERN AVENUE AND ROSECRANS AVENUE.						
Ecological:	IN DRY DITCHES SIMULATING VERNAL POOLS. WITH CRYPISIS ACULEATA IN LOW MEADOW.						
General:	OBSERVED IN 1944 AND 1946. NO PLANTS SEEN IN 1976; POPULATION EXTIRPATED PER GRIGGS.						
Owner/Manager:	UNKNOWN						



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	13	Map Index: 47232	EO Index: 47232	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2002-02-14

Quad Summary: Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.83581 / -118.11743	Accuracy:	1 mile
UTM:	Zone-11 N3744512 E396606	Elevation (ft):	40
PLSS:	T04S, R12W, Sec. 10 (S)	Acres:	0.0

Location: NEAR LAKEWOOD, WEST LOS ANGELES COUNTY.

Detailed Location:

Ecological:

General: COLLECTED NEAR LAKEWOOD ACCORDING TO GRIGGS (1977), UNKNOWN WHEN SEEN. APPARENTLY EXTIRPATED.

Owner/Manager: UNKNOWN

Occurrence No.	14	Map Index: 26503	EO Index: 47231	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2002-02-14

Quad Summary: Whittier (3311881), South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.94216 / -118.13586	Accuracy:	1 mile
UTM:	Zone-11 N3756324 E395032	Elevation (ft):	125
PLSS:	T03S, R12W (S)	Acres:	0.0

Location: NEAR DOWNEY, WEST LOS ANGELES COUNTY.

Detailed Location:

Ecological:

General: COLLECTED NEAR DOWNEY ACCORDING TO GRIGGS (1977), UNKNOWN WHEN SEEN. APPARENTLY EXTIRPATED.

Owner/Manager: UNKNOWN



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
<http://www.fws.gov/carlsbad/>

In Reply Refer To:

March 22, 2021

Consultation Code: 08ECAR00-2021-SLI-0775

Event Code: 08ECAR00-2021-E-01727

Project Name: Former Union Carbide Torrance Distribution Facility RAP

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

<http://>

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2021-SLI-0775

Event Code: 08ECAR00-2021-E-01727

Project Name: Former Union Carbide Torrance Distribution Facility RAP

Project Type: ** OTHER **

Project Description: The proposed project would be located in an industrial area in the City of Torrance, in the County of Los Angeles. The existing 37-acre Torrance Distribution Facility is located at 19500 Mariner Avenue (Assessor's Parcel Number: 7352-001-030) and is owned by the Union Carbide Corporation (UCC), a wholly owned subsidiary of The Dow Chemical Company. The project site consists of a 13.8-acre area within the southeastern portion of the larger facility.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.85360420000001,-118.34753625903303,14z>



Counties: Los Angeles County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [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.

Mammals

NAME	STATUS
Pacific Pocket Mouse <i>Perognathus longimembris pacificus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

Birds

NAME	STATUS
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Western Snowy Plover <i>Charadrius nivosus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Insects

NAME	STATUS
Palos Verdes Blue Butterfly <i>Glaucopsyche lygdamus palosverdesensis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8535	Endangered

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp <i>Streptocephalus woottoni</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX C

**Cultural Resources Records Search Results
(Confidential)**

