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Data Request Response No. 3

Prairie Song Reliability Project

DECEMBER 2025

Prepared for:

CALIFORNIA ENERGY COMMISSION

Prepared by:

PRAIRIE SONG RELIABILITY PROJECT, LLC

Table of Contents

SECTION **PAGE NO.**

1 Introduction 1

2 Biological Resources 2

3 Land Use 16

4 Water Resources 19

ATTACHMENTS

1 Redline Section 3.2, Biological Resources and appendices (note, only updated appendices are included)

2 Redline Section 2, Project Description (note, appendices are not included as there has been no change to the previously provided appendices)

3 State Water Resources Control Board, Division of Drinking Water Correspondence and Form

4 Redline Section 3.15, Water Resources (note, appendices are not included as there has been no change to the previously provided appendices)

5 Incidental Take Permit Application Package

1 Introduction

On December 1, 2025, Prairie Song Reliability Project, LLC (Applicant) received a Second Completeness Review and Request for Information from California Energy Commission (CEC) Staff for the Prairie Song Reliability Project (Project; Docket Number 25-OPT-02) in response to the Applicant's application filed on July 2, 2025 (TN:265211), Data Request Response No. 1 (filed on September 4, 2025 TN:265873 and 265874), Data Request Response No. 2 (filed on October 15, 2025 TNs:266605-266610), and supplemental filings on October 23, 2025 (TNs: 266803-266806). Table 1 lists the data responses provided in this document.

Table 1. Data Responses Provided Herein

Data Request Resources Area	Data Request Number
Mandatory Opt-In Requirements	REV 1 DR BIO 2 through 7 and REV 1 DR BIO 13
Biology	REV 1 DR BIO 1 through 13
Land Use	REV 1 DR LAND 1
Water Resources	REV 1 DR WATER 1 through 3

Redline versions of the project application are included with this data response. The redlines assume all redlined sections that were previously submitted in Data Response 1 and 2 were accepted. Redlines in the attached responses show only changes pertinent to the data response included in this submission.

2 Biological Resources

The Data Request Response to DR BIO-1 included several representative photos of upland habitat (photos 1 through 10), aquatic features (photos 11 through 24), and swales and erosional features (photos 26 through 30) (Attachment 15: Appendix 3.2I– Photo Exhibit (TN 266607)). However, it is unclear if the photos provided include representative portions of the site that would be developed, as requested in DR BIO-1.

REV 1 DR BIO-1. Please provide photos of areas that would be developed including photos of upland areas on each side of Soledad Canyon Road where the BESS array would be built and of upland areas where the substation would be built.

REV 1 DR BIO-1 RESPONSE: An update of Appendix 3.2I – Photo Exhibit has been included in this data response. The updated appendix includes a photo exhibit key map showing the specific locations of the photos provided in Appendix 3.2I - Photo Exhibit. The updated appendix also includes five new photos (photos 31 through 35) that provide images of the upland areas that would be developed on each side of Soledad Canyon Road. The locations of photos 31 through 35 are also provided in the key map. This appendix supersedes the version of Appendix 3.2I that was included in TN 266607.

The Data Request Response to DR BIO-6 included the applicant's proposed mitigation measure MM-BIO-4, which provides avoidance and minimization measures for Crotch's bumble bee, and the applicant's statement that the project is not expected to involve take of Crotch's bumble bee (TN 266610, response DR BIO-6). However, as Crotch's bumble bee have a low detection probability and move nest sites each year, CDFW recommends that project proponents perform a full round of surveys each year that project activities would occur or assume presence of the species (CDFW 2023). CDFW also recommends that a biological monitor be present during vegetation removal and ground-disturbing activities (CDFW 2023). As there is habitat present on the project site and the project is within the range of Crotch's bumble bee, there is potential for Crotch's bumble bee to move on to the project site after the surveys that have been conducted but before ground disturbance, as well as potential for Crotch's bumble bee to move on to the project site during construction. As such, CEC staff recommends that the applicant apply for incidental take authorization for Crotch's bumble bee under the CEC's in-lieu permitting authority or full avoidance of the species would be required. Securing incidental take authorization at this stage would help prevent potential project delays associated with implementing full avoidance measures or pursuing a post-certification project change to obtain take authorization should Crotch's bumble bee be detected on the project site in the future.

REV 1 DR BIO-2. Please confirm that the project will not seek in-lieu take authorization for Crotch's bumble bee. Alternatively, state that the project will seek in-lieu take authorization for Crotch's bumble bee. If seeking take authorization, please provide all the information required in California Code of Regulations, title 14, section 783.2(a)(1)(a)(10).

REV 1 DR BIO-2 RESPONSE: The Applicant agrees that annual surveys should be conducted before and during construction activities and that a biological monitor should be present during construction activities. The Applicant plans on conducting an additional survey during the 2026 survey season, as well as the annual surveys mentioned above, to verify presence/absence of Crotch's bumble bee. Out of an abundance of caution at this time, an incidental take permit application package is included as an attachment herein. The information required in California Code of Regulations, title 14, section 783.2(a)(1)(a)(10) is provided in the application

package. The application is submitted for review and processing only and submission should not be construed as acceptance of any future permit terms relating to potential take of the Crotch's bumble bee.

The Data Request Response to DR BIO-7 provided information regarding culverts or other potential jurisdictional features that would be in the work area, including those affected by project-related traffic. However, it is not clear from the response if the proposed project-related increased use of roads during construction and operation would result in siltation, require culvert repair, or result in other impacts to streams, including any downstream impacts.

REV 1 DR BIO-3. Please describe any proposed upgrades or maintenance activities along existing and new access roads, including those southeast of Carson Mesa Road, during construction and operation. The description should include potential upgrades and maintenance activities of interest and specific locations: culvert repair, culvert installation, prism expansion, or gravel augmentation.

REV 1 DR BIO-3 RESPONSE: The project will employ standard Best Management Practices (BMPs), such as those set forth in the California Stormwater Quality Association (CASQA) Stormwater Best Management Practice Handbook and/or the latest version of Caltrans' Construction Site Best Management Practices Manual (March 2024), during both construction and operations to minimize erosion, siltation, and potential impacts to streams. Before construction, the project will submit a Stormwater Pollution Prevention Plan, to be approved (Approved SWPPP) by the CEC Compliance Project Manager (CPM), that identifies specific areas, and BMPs, to be employed to reduce sedimentation in streams. Prior to commencing project operations, the project owner shall obtain CPM approval of a site-specific operations Drainage, Erosion and Sedimentation Control Plan (Approved DESCP) that addresses all project elements of stormwater management during project operations. Please see the information below for examples of specific BMPs that may be employed at each local road or construction area utilized by project construction and operations traffic. The specific locations and BMPs identified in the Approved SWPPP and Approved DESCP will supersede the information provided below.

BESS Site Construction and Operations BMPs

Sierra Highway Off and On Ramp to Soledad Canyon Road

Construction – There is one culvert located below State Route 14 and the Sierra Highway. Construction traffic will not affect this culvert, and the project does not expect the need for any culvert repair or installation on this road section during construction. The project will employ standard BMPs at the construction site such as, but not limited to, temporary graveled construction entrances, silt fencing, drainage management and inspection, storm drain inlet protection, and applying dust control stabilizers at the site.

Operations – Once operational the site will consist of pavement and gravel surfaces inside the project wall and landscaping outside of the project wall. These surfaces minimize the opportunity for sediment to leave the site. Typical traffic will be limited to small trucks and passenger vehicles, during augmentation traffic will consist of large trucks and a crane. The opportunity for additional erosion on the Sierra Highway caused by project traffic or augmentation will be minimal. The BMPs proposed in the project Water Quality Management Plan (WQMP) will minimize potential for downstream impacts to streams.

Soledad Canyon Road to the BESS Site

Construction – The majority of the construction traffic for the project will take place between Soledad Canyon Road's intersection with the Sierra Highway to the east and the project BESS yards. There is one existing culvert within that stretch of road. It is not expected to need repair. During construction the existing culvert will be maintained and inspected to ensure no obstructions are present and street sweeping may be used to remove any tracked sediment from construction vehicles entering and leaving the project site. In addition to BMPs employed along the road, during construction the following site BMPs will be employed to limit sediment leaving the site and depositing on roadways:

- All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks;
- The main access roads through the facility will be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction, and delivery areas for operations materials (chemicals, replacement parts, etc.) will be paved or treated prior to taking initial deliveries; and
- Site soil shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board (CARB) approved soil stabilizers, and that shall not increase any other environmental impacts, including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. All other disturbed areas in the project and linear construction sites shall be watered as frequently as necessary during grading; and after active construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods The frequency of watering can be reduced or eliminated during periods of precipitation.

Operations – Once operational, the BESS facility site will consist of pavement and gravel surfaces inside the project wall and landscaping outside of the project wall, these surfaces minimize the opportunity for sediment to leave the site. Typical traffic will be limited to small trucks and passenger vehicles, during augmentation traffic will consist of large trucks and a crane. The BMPs proposed in the project WQMP will minimize potential for downstream impacts to streams. Proposed maintenance and inspection activities include but are not limited to the following: routine inspection of roadway storm drains, roadside water conveyance systems and culverts under driveways, maintenance of interior gravel areas to minimize erosion, maintenance of landscaping, and stabilization of slopes at the site. The BMPs proposed in the project WQMP will minimize the potential for downstream impacts to streams.

Water Conveyances Through the Site

During operation, the proposed 60" and 72" storm sewer pipes at the south BESS facility will have stormwater energy dissipators installed at their downstream ends to dissipate the high velocity runoff flows to prevent siltation and minimize erosive damage. Onsite staff will inspect and maintain the dissipation devices to ensure they are functioning properly.

Gen-Tie and Gen-Tie Laydown Yard Construction and Operations BMPs

All construction and operations activities for the following roads and project areas are for the Gen-Tie and Gen-Tie Laydown Yard. Large truck activities associated with construction will be reduced compared to the BESS site activity as well as the small truck trips associated with the maintenance of the Gen-Tie. Traffic to and from the Gen-Tie laydown yard will support construction of the BESS site. Once construction is complete, the Gen-Tie laydown yard will no longer be used by the project.

BESS Site to Aliso Canyon Road

Construction - There are up to three culverts between the project site and Soledad Canyon Road's intersection with Aliso Canyon Road. They are not expected to need improvement or repair to accommodate construction traffic. Trucks leaving the project site and entering the road will exit through graveled construction ingress and egress points. The first 500 feet of the road will be inspected for increased sedimentation and swept as necessary. Ingress and egress points will be inspected daily. Increased sedimentation after the 500 feet west of the site is not expected. If increased sedimentation on the road is observed, street sweeping will be extended to cover the areas where sedimentation is observed. Culverts along this section of road will be inspected weekly for signs of increased sedimentation from construction activities.

Operations – The truck trips along this portion of the road are not expected to increase sedimentation on the road and do not require additional BMPs.

Aliso Canyon Road to Carson Mesa Road (Paved)

Construction – There is one culvert along this section of road just south of the intersection of Aliso Canyon Road and Soledad Canyon Road. It is not expected that the culvert will need any repair due to construction traffic. Additional BMPs to mitigate potential steam impacts are not necessary along this section of road. Construction traffic will have traveled approximately 1.9 miles from the site to the intersection to the culvert or approximately 2.0 miles along the paved portion of Carson Mesa Road and Aliso Canyon Road. It is expected that the BMPs employed at the BESS site and the Gen-Tie laydown yard will have mitigated any potential increased sedimentation by the time traffic reaches this section of the road. In any event, if increased sedimentation on the road is observed, street sweeping will be extended to cover the areas where sedimentation is observed. The culvert along this section of road will be inspected weekly for signs of increased sedimentation from construction activities.

Operations - The truck trips along this portion of the road are not expected to increase sedimentation on the road and will not require additional BMPs.

Carson Mesa Road (Paved)

Construction – There are no culverts along this section of road. The pavement ends where Carson Mesa intersects with El Sastre Road. Dust may accumulate along the eastern 500 feet of the paved section of Carson Mesa Road during construction. The road will be inspected weekly and swept as necessary to mitigate any potential downstream sedimentation impacts.

Operations – The infrequent truck trips along this portion of the road for Gen-Tie vegetation maintenance and mitigation/conservation inspections are not expected to increase traffic loads nor sedimentation on the road and will not require additional BMPs.

Carson Mesa Road (Unpaved), Foreston Drive, El Sastre Road, and Kentucky Springs Road

Construction and operations BMPs for the unpaved roads in this area of the project will all be similar.

Construction – Road improvements are only expected for Kentucky Springs Road. For all the roads in this group, temporary erosion control measures such as silt fencing, gravel bags, and sandbags will be used during construction throughout the project areas. A dust suppressing agent, like a soil binder or method with equivalent erosion control effectiveness, may be applied to roads to reduce dust and soil movement. Any water features crossing these roads will be identified before construction and BMPs will be installed on the downstream side of the feature to reduce siltation and sedimentation. BMPs will be inspected weekly and within 24 hours after each qualifying rain event to ensure that sediment mitigation measures are working properly.

In addition to the BMPs mentioned above, Kentucky Springs Road will be graveled to reduce dust and potential erosion. Kentucky Springs Road may also be widened to 15' to accommodate construction truck traffic. BMPs such as silt fencing will be installed along the downstream side of any construction along Kentucky Springs Road.

Operations - The infrequent truck trips along these roads for Gen-Tie vegetation and mitigation/conservation inspections are not expected to increase traffic loads nor sedimentation on the road and will not require additional BMPs.

Gen-Tie Laydown Yard on Kentucky Springs Road

Construction – The Gen-Tie laydown yard on Kentucky Springs Road will employ graveled ingress and egress points and employ other BMPs such as silt fences, fiber rolls, and routine inspection and management to reduce potential erosion at the site. In addition to BMPs described above, during construction the following site BMPs will be employed to limit sediment leaving the site and depositing on roadways:

- All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions will be provided with a cover, or the materials will be sufficiently wetted and loaded onto the trucks;
- The main access roads through the facility will be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction, and delivery areas for operations materials (chemicals, replacement parts, etc.) will be paved or treated prior to taking initial deliveries; and
- Site soil will be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be as efficient as or more efficient for fugitive dust control than CARB approved soil stabilizers, and that will not increase any other environmental impacts, including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. All other disturbed areas in the project and linear construction sites will be watered as frequently as necessary during grading; and after active construction activities shall be stabilized with a non-toxic soil stabilizer or

soil weighting agent, or alternative approved soil stabilizing methods The frequency of watering can be reduced or eliminated during periods of precipitation.

Operations – The Gen-Tie laydown yard will be returned to a pre-existing condition after the end of construction.

New Roads for Gen-tie Pads

Construction – Typical BMPs for erosion control like silt fencing, straw bales, and dust suppression agents will be employed during construction. Additional focus will be given to areas where roads cross drainage features. Roads will be designed to be at or near grade. Based on the proposed design, no upstream ponding is expected from road construction or operations. Inspections will be carried out weekly and after each qualifying rain event during construction to ensure that BMPs are functioning properly.

Operations - New roads leading to the Gen-Tie Pads will be stabilized with gravel surfacing, or a similarly effective erosion control method, to reduce sediment movement during operations. Based on the proposed design, no upstream ponding is expected along the roads from operations. During operations, roads will be inspected monthly and after qualifying rain events to ensure that erosion is not occurring and that sediment is not migrating downstream to water bodies. The focus will be on areas where new roads cross existing drainage features. If sediment movement is found, the road will be repaired and BMPs to reduce sedimentation will be installed.

Gen-Tie Pads

Construction – Access roads to Gen-Tie pad will be gravel surfaced , or employ a similarly effective erosion control method, to reduce sedimentation and erosion. Erosion control blanketing, silt fences, and check dams will be employed at the Gen-Tie pads along with other stormwater BMPs as necessary.

Operations - Each Gen-Tie pad will manage stormwater runoff using shallow infiltration basins. Stormwater BMPs will be inspected monthly and after each rain event to ensure proper function.

The Data Request Response to DR BIO-11 provided standalone information that would be included in a Lake and Streambed Alteration Agreement (LSAA) notification in Attachment 16: Appendix 3.2K– Completed 1602 Lake and Streambed Alteration Agreement Application Package (TN 266607). However, it is unclear from the project description what activities will take place in areas subject to Fish and Game Code, sections 1602 through 1615. For the purposes of seeking lake and streambed alteration authorization, the project description should be limited to the portions of the overall project that intersect with streams or associated riparian areas.

REV 1 DR BIO-4 Please resubmit Attachment 16: Appendix 3.2K– Completed 1602 Lake and Streambed Alteration Agreement Application Package with a project description that only includes portions of the overall project that intersect with streams or associated riparian areas.

REV 1 DR BIO-4 RESPONSE: An updated version of Appendix 3.2K has been included in this response. A project description that is specific to portions of the project that intersect with streams or associated riparian areas has been added as new Attachment C.1 within Appendix 3.2K. This appendix supersedes the version of Appendix 3.2K that was included in TN 266607.

REV 1 DR BIO-5 Please submit a map clearly labelling each area where the project footprint would intersect with streams or associated riparian areas, the type of work that will occur in each of these areas, and the amount of permanent and temporary impacts in each area.

REV 1 DR BIO-5 RESPONSE: The updated version of Appendix 3.2K included in this response contains a Jurisdictional Water Impacts figure (Attachment B: Figure 3) that identifies all streams and erosional features mapped in the LSAA and overlays those features with various project activities or infrastructure. The figure symbology also identified if the impact is temporary or permanent. Within Figure 3, an overview figure is provided as well as a detailed mapbook. In the project description, the updated Appendix 3.2K includes a table named Regulated Streams and Impact Summary for the Project within new Attachment C.1. This table includes all mapped features in the project area, the area of permanent or temporary impacts if any, and the reason for the impact.

REV 1 DR BIO-6 Describe the potential for animals to become entrapped in the underground stormwater retention system, or in other portions of the drainage system, and if minimization measures are necessary or feasible to prevent entrapment of small animals.

REV 1 DR BIO-6 RESPONSE: The underground stormwater retention system will have two paths for connection to surface stormwater. The first path will be through soil infiltration. There is no potential for animals to become entrapped in the system through this path. The second path is through the catch basins, located throughout the site, that will connect surface flows to the underground infiltration system through underground pipes. In addition to the potential risk posed by the catch basins, pipes, and culverts used to move stormwater around the site pose a risk of entrapment for small animals. The proposed underground stormwater retention system and associated drainage infrastructure present a potential risk of entrapment for small animals, including amphibians, reptiles, small mammals, and birds. Wildlife may enter the stormwater system structures seeking water, shelter, or foraging opportunities. The project will implement minimization measures to reduce the likelihood of wildlife entrapment which are consistent with best management practices for stormwater infrastructure. Measures will include inlet and outlet protection including installation of grates, screens, or mesh coverings at pipe openings to restrict wildlife access while maintaining hydraulic capacity as well as use of sloped or angled inlet and outlet structures that discourage wildlife entry and reduce the potential for nesting or sheltering. The stormwater system will also be maintained and monitored by onsite personnel over the life of the project to ensure protective devices remain functional, to remove any trapped animals, and to clear debris that may attract wildlife.

The Data Request Response to DR BIO-12 provided updated figures and GIS shapefiles that included project access roads and any other project-related disturbances. However, there are discrepancies between the total permanent and temporary impact areas listed in the Land Cover table in Table 3.2-9 in the Data Request Response to DR BIO-13 (TN 266610), which details temporary and impacts of impact by project component and habitat type, and those listed in Table 3.2-6 of the initial application (TN 264413).

REV 1 DR BIO-7 Please explain why the impact areas reported in Table 3.2-9 differ from those reported in Table 3.2-6, despite the fact the project design has not changed.

REV 1 DR BIO-7 RESPONSE: Table 3.2-9 represents the correct impact areas. Table 3.2-6 in the initial application (TN 264413) has been replaced by table 3.2-9. The information in Section 3.2 (TN 266610) effectively replaces all the information in section 3.2 in the original application (TN 264413)

The Data Request Response to DR BIO-20 did not include the requested updates to the "Special-Status Wildlife" table in Appendix 3.2B of the Application. Specifically, the table was not revised to include potential for species to occur based on the definition of "Sensitive Local Native Resource" (Los Angeles County Sensitive Bird Species Working Group, 2009), or identify which may have the potential to occur.

REV 1 DR BIO-8 Please update the "Special-Status Wildlife" table in Appendix 3.2B of the Application to include vesper sparrow (*Pooecetes gramineus*), western meadowlark (*Sturnella neglecta*), and Scott's oriole (breeding) (*Icterus parisorum*). Please resubmit the "Special-Status Wildlife" table in Appendix 3.2B to reflect the potential to occur for these species within 10 miles of the project area. Please submit a clean and redline and strikethrough version of the table.

REV 1 DR BIO-8 RESPONSE: The Special-Status Wildlife table in Appendix 3.2B has been updated to include vesper sparrow, western meadowlark, and Scott's oriole (breeding). A clean and redline version are included herein.

The Data Request Response to DR BIO-21 partially provided requested materials for CEC staff to determine whether the project would conform with the Los Angeles County Significant Ecological Area (SEA) Ordinance, including a (1) Biological Constraints Map, (2) a Conceptual Project Design, (3) a Biota Report, and (4), a Protected Tree Report. However, the applicant's submitted materials in response to DR BIO-21 are incomplete per the requirements set forth in the SEA Ordinance as they did not include subparts as listed below. If currently unavailable, please describe constraints and projected timeline to completion.

REV 1 DR BIO-9

1. Please provide an updated Biological Constraints Map (BCM), originally included as Attachment B to the Biota Report (TN266606). Please incorporate the following items from the SEA Ordinance Guidelines, defined under Section 22.14.190 (D) and Chapter 6 (pp. 64-65) of the SEA Implementation Guide, into the BCM:

a) Parcel boundaries

b) Sensitive species and protected tree observations (see Comment 3o, below under Biota Report and Comment 4a. below under Protected Tree Report)

c) Include existing protected open space that has been recorded on or adjacent to any part of the subject parcel.

REV 1 DR BIO-9 (1) RESPONSE: An updated Biological Constraints Map (BCM) has been included as Appendix B to the Biota Report (Appendix 3.2G). The updated map includes parcel boundaries and existing protected open space. Regarding the reference to Comment 3o, it is our understanding that the data request likely meant to refer to Comment 3n regarding the 3 referenced rare plants included in the previously provided plant compendium. Regarding the 3 referenced rare plants, no locations were mapped during field surveys, however, we understand 1 of the plants was added to the California Native Plant Society rare plant list earlier this year and therefore would not have been surveyed for during prior 2023 surveys. Please see the response to Comment 3n below for additional discussion regarding the 3 referenced rare plants. Regarding the reference to Comment 4a, a supplemental arborist survey was completed in early December 2025 to map any potential blue elderberry within the SEA. No blue elderberry was found within the SEA within the project survey area. The blue elderberry listed in the species list for the rare plant survey report occurs on the BESS facility site which is

outside of the SEA. The updated Biota Report version (Appendix 3.2G) supersedes the version of the Biota Report that was included in TN 266607.

2. Please provide a Conceptual Project Design (CPD), required under section 22.102.050 (A) (3) of the SEA Ordinance and consistent with Chapter 5, no. 3 (p. 54) of the SEA Implementation Guide. The CPD can be shown directly on the BCM or separately as a Conceptual Site Plan.

REV 1 DR BIO-9 (2) RESPONSE: A Conceptual Project Design has been provided within the updated Biota Report (Appendix D within Appendix 3.2G). Please note that due to the amount of data required to be included on the Conceptual Project Design, the Conceptual Project Design is not included on the BCM, but rather is provided as a separate exhibit and is further split into 2 separate figures (Figure 2, Conceptual Project Design – Project Components and Figure 3, Conceptual Project Design – Graded Areas, Vegetation, and Fuel Modification Areas). Please also note that Figure 2 and 3 each have 2 pages with Figure 2A showing the western portion of the project and Figure 2B showing the eastern portion. The same spatial separation applies for Figure 3. To provide clarification on the fuel modification areas, the following description is provided which is also included in the updated Biota Report:

Public Resources Code Sections 4292 and 4293 provides for 10 feet of vegetation clearance in all directions for any transmission line operating above 110 kilovolts (kV) if determined to be required by the director or agency with primary responsibility for fire protection. The project's proposed 500 kV gen-tie line is designed to be higher than 35 feet above the ground surface during heavy sag conditions. The majority of the gen-tie line is greater than 45 feet above ground during heavy sag conditions, meaning that vegetation would need to be at least 35 feet tall to require maintenance for fuel modification. The vegetation communities in this area do not typically grow to be 35 feet tall so it is unlikely any fuel modification will be required. However, there are two areas where the proposed gen-tie line is near 35 feet above the ground. In these two areas, fuel modification may be necessary, on a spot basis, to limit the height of vegetation to comply with Public Resources Code Sections 4292 and 4293. These two areas are shown on Figure 3A, Conceptual Project Design – Graded Areas. Vegetation Maintenance area 1 (VM1) is a 40-foot by 40 foot area at the top of a ridge. There is a road on the top of the ridge making it unlikely that any vegetation maintenance will be necessary near where the gen-tie line approached 35 above the surface. Vegetation Management area 2 (VM2) is a 360-foot by 40-foot long area between gen-tie pole 9 and gen-tie pole 10 (POCO) where the proposed gen-tie line is less than 40 feet above the ground surface. There is the potential for vegetation management along VM2 for any vegetation that approaches 30 feet in height.

3. The Biota Report included in Appendix 3.2G (TN266606,) is considered incomplete. Please provide a crosswalk of the following information as required under section 22.102.080 (B) (1) (b) of the SEA Ordinance and consistent with the requirements defined in Chapter 6 (pp. 67-68) of the SEA Implementation Guide:

a. Information typically required on the cover page of Biota Reports is missing, including, APNs, and a clear indication that the contact listed on the report is the head/supervising biologist leading the effort.

b. a parcel and acreage table

c. topographic map (with parcel outlines, SEA boundaries, open space areas)

d. topographic lines superimposed on site plans with vegetation mapped

e. grading plans with vegetation superimposed (if currently available)

f. description of disturbance schedule

g. a table of impacts to all vegetation types (including non-sensitive vegetation)

h. a table of acreages, additions and deductions of SEA lands

i. a map of proposed vegetation impacts with grading and fuel-modification superimposed on the vegetation map

j. a map showing locations of sensitive plant species observations, along with protected tree species, indicating removals and/or disturbances proposed

k. a map showing wildlife corridors and habitat linkages, as well as any site-specific features (ridgelines, drainages, culverts, fencing, etc.) that may facilitate or constrain movement, near the project that could be impacted

l. discussion of impacts on sensitive vegetation types, including references to Global and State Ranks that serve as a basis to demonstrate if the vegetation type is rare at the state level or throughout its global distribution

m. inclusion of birds on the LA County Sensitive Bird Species in potential-to-occur tables and discussion where relevant

n. requisite mapping and a detailed discussion of rare plants included in the plant compendium (Note: Raven's blazing-star (*Mentzelia ravenii* CRPR 1B.3) smooth goldfields (*Lasthenia glaberrima*, CRPR 1B), and Douglas' fiddleneck (*Amsinckia douglasiana*, CRPR 4.2) are listed in the plant compendium but are not discussed in the report or mapped in the maps

o. a discussion of wildlife corridors and habitat linkages, as well as any site-specific features (ridgelines, drainages, culverts, fencing, etc.) that may facilitate or constrain movement, near the project that could be impacted

p. a discussion of impact acreage remaining as natural open space and percentage of the original,

q. a discussion of existing designated open space on and adjacent to the parcel in question

REV 1 DR BIO-9 (3) RESPONSE: A crosswalk matrix of the updated Biota Report (Appendix 3.2G) is provided below to direct the reader to specific portions of the report where the required information under section 22.102.080 (B) (1) (b) of the SEA Ordinance and the requirements defined in Chapter 6 (pp. 67-68) of the SEA Implementation Guide can be found within the report. The updated Biota Report version supersedes the version of the Biota Report that was included in TN 266607.

Biota Report Requirement	Location within the Biota Report
a. Information typically required on the cover page of Biota Reports is missing, including, APNs, and a clear indication that the contact listed on the report is the head/supervising biologist leading the effort.	APNs are provided in Section 1.1. Michael Cady, Senior Biologist, is listed on the cover page.
b. a parcel and acreage table	See Section 1.1 – Project Location
c. topographic map (with parcel outlines, SEA boundaries, open space areas)	See Figure 9, Regional Setting
d. topographic lines superimposed on site plans with vegetation mapped	See Figure 4, Vegetation Communities and Land Covers

Biota Report Requirement	Location within the Biota Report
e. grading plans with vegetation superimposed (if currently available)	See Conceptual Project Design – Graded Areas (Appendix D of the Biota Report)
f. description of disturbance schedule	See Section 1.2.1 – Transmission and Interconnection
g. a table of impacts to all vegetation types (including non-sensitive vegetation)	Table 10. Potential Impacts to Vegetation Communities and Land Covers (Section 6.4)
h. a table of acreages, additions and deductions of SEA lands	Table 10. Potential Impacts to Vegetation Communities and Land Covers (Section 6.4)
i. a map of proposed vegetation impacts with grading and fuel-modification superimposed on the vegetation map	See Figure 4, Vegetation Communities and Land Covers. See also See Conceptual Project Design – Graded Areas (Attachment to D to the Biota Report)
j. a map showing locations of sensitive plant species observations, along with protected tree species, indicating removals and/or disturbances proposed	See Figure 5, Biological Survey Results for location of sensitive plant species. Sensitive plant species will not be impacted by the project. For protected tree locations, see Figure 8, Protected Trees and for a detailed view of Protected Trees to be removal and/or encroaches upon see Appendix D of the Protected Tree Report.
k. a map showing wildlife corridors and habitat linkages, as well as any site-specific features (ridgelines, drainages, culverts, fencing, etc.) that may facilitate or constrain movement, near the project that could be impacted	See Figure 5, Biological Survey Results and Figure 6, Potential Jurisdictional Waters
l. discussion of impacts on sensitive vegetation types, including references to Global and State Ranks that serve as a basis to demonstrate if the vegetation type is rare at the state level or throughout its global distribution	See Section 6.4 – Impacts to Vegetation Communities
m. inclusion of birds on the LA County Sensitive Bird Species in potential-to-occur tables and discussion where relevant	See Section 5.3 – Special Status Wildlife Species
n. requisite mapping and a detailed discussion of rare plants included in the plant compendium (Note: Raven's blazing-star (*Mentzelia ravenii* CRPR 1B.3), smooth goldfields (*Lasthenia glaberrima*, CRPR 1B), and Douglas' fiddleneck (*Amsinckia douglasiana*, CRPR 4.2) are listed in the plant compendium but are not discussed in the report or mapped in the maps	See Section 5.2 – Special Status Plant Species. Per the CNPS Rare Plant Inventory, smooth goldfields does not have a CRPR and has not been included in our discussion of rare plants. The other two species listed in the DR are discussed in Section 5.2.
o. a discussion of wildlife corridors and habitat linkages, as well as any site-specific features (ridgelines, drainages, culverts, fencing, etc.) that may	See Section 5.5 – Wildlife Corridors and Habitat Linkages and Section 8.B, F

Biota Report Requirement	Location within the Biota Report
facilitate or constrain movement, near the project that could be impacted	
p. a discussion of impact acreage remaining as natural open space and percentage of the original,	See Section 6.4 – Impacts to Vegetation Communities
q. a discussion of existing designated open space on and adjacent to the parcel in question	Additional language has been added to Section 2.1, Onsite Conditions and Figure 9: Regional Setting shows the areas adjacent to the project that are designated for open space.

4. The Protected Tree Report, provided as Appendix A of the Biota Report (TN266606, Appendix 3.2G), is missing components as required under section 22.102.070 (C) (2) of the SEA Ordinance. Please update the Protected Tree Report to include the following information, or if not possible due to level of design, for instance, or other, similar preventative situation, please explain why:

a. Santa Clara SEA Trees: Please map and discuss the occurrence of blue elderberry (Sambucus nigra ssp. caerulea), which is included in the species list for the rare plant survey report but is not mapped or discussed in report.

b. Provide a map of tree protected zones (TPZs) with potential encroachments, currently up to 13 trees. Clearly identify trees that are proposed to be preserved or may require removal on the maps. Identify the extent of encroachment for each alignment.

c. Specify details on whether the "impact percent" in the Tree Information Matrix refers to an impact on the encroachment area or the tree canopies (i.e., pruning). Please provide clarification in the revised Section 3.2 (Impact Analysis) regarding impacts to the encroachment area, if not already provided.

REV 1 DR BIO-9 (4) RESPONSE:

a. The project site includes land both within and outside of the Santa Clara River SEA. The survey area rare plant survey encompassed the entire project site while the Survey Area for the Protected Tree Report (Figure 3 of the report) only included the portion of the project site located within the SEA. On December 3rd and 4th, 2025 International Society of Arboriculture Certified Arborists Aida Castro and Katrina Burritt conducted an additional survey to include additional areas within the SEA (now that site plans have been developed further since the original Protected Tree survey) and to confirm that no blue elderberry (*Sambucus nigra* ssp. *Caerulea*) occurs within the Survey Area. No blue elderberry was found within the portion of the project site located within the SEA.

b. The locations of the individual trees that would be subject to potential impacts by the proposed project are presented in Appendix D, Tree Impacts, of the Protected Tree Report. Appendix D shows each individual tree point colored to indicate no impact, encroachment, or removal, the TPZ of each tree, and the relation to the gen-tie work area, pole pad and access road areas, and the overhead gen-tie route options.

c. The impact percent shown in Appendix C, Tree Information Matrix, of the Protected Tree Report is the total percentage of the TPZ impacted for each tree. The TPZ is defined as the area that extends 5 feet out from the dripline of the Protected Tree or 15 feet from the trunk, whichever distance is greater.

Tree removal is anticipated when proposed grading activities affect more than 30% of a TPZ. Encroachment is expected when less than 30% of the TPZ is disturbed, such as through soil or root disruption, or when pruning is required. To determine impact designations, Dudek arborists used the County's definition of direct impact, which includes tree removal, root disturbance, soil excavation and compaction, grade changes, canopy loss, and trunk damage. Based on these criteria, project-related impacts are classified as either direct impacts (removal or encroachment) or no impact (trees preserved without disturbance).

The Data Request Response to DR BIO-22, provided a list of species observed within 1,000 feet of the linear facility corridors, however, it did not provide a description of all species expected to occur, as well as those observed, within 1,000 feet of the linear facility corridors.

REV 1 DR BIO-10 Please revise the list and associated descriptions to include the following bird species which meet the definition of "Sensitive Local Native Resource" (Los Angeles County Sensitive Bird Species Working Group, 2009): vesper sparrow (*Pooecetes gramineus*), western meadowlark (*Sturnella neglecta*), Scott's oriole (breeding) (*Icterus parisorum*). These species should be incorporated into the discussion of special-status species (see also REV 1 DR BIO-8. Please submit a clean and redline and strikethrough version of revised Section 3.2.

REV 1 DR BIO-10 RESPONSE: Discussion of the three bird species has been added to Section 3.2, Biological Resources in redline text. The discussion can be found in Section 3.2.1.10 Sensitive and Special-Status Wildlife Species. The three species are mentioned in the section but not discussed in detail because they were not observed during surveys and they have a low potential to occur in the Study Area due to the specific habitat characteristics of the Study Area. An assessment of each species potential to occur can be found in the updated Appendix 3.2B Potential to Occur Tables and Compendia. This version of Section 3.2 supersedes the version of Section 3.2 that was included in TN 266607.

The Data Request Response to DR BIO-23, did not provide the requested detailed maps indicating where biological surveys were conducted for Crotch's bumble bee or rare plants, including transects, surveys routes, and/or polygons of surveyed area.

REV 1 DR BIO-11 Provide maps showing the areas surveyed for Crotch's bumble bee and rare plant surveys. See also **REV 1 DR BIO-9**.

REV 1 DR BIO-11 RESPONSE: The Crotch's bumble bee and rare plant survey areas have been added to Figure 3.2-7 within Section 3.2. As discussed in Section 3.2.1.5, Biological Surveys, of the application, the Crotch's bumble bee surveys were conducted by visually surveying suitable habitat within the Study Area for 1 person-hour per 3 acres of potential habitat. Biologists walked wandering transects through these resources with a goal of observing bumble bees in passing and observing bumble bee nest sites associated with small mammal burrow or other appropriate soil cavities. As also discussed in Section 3.2.1.5 of the application, the rare plant surveys were completed by biologists walking transects in suitable habitat, spaced approximately 5 meters to 10 meters apart based on the density of vegetative cover, throughout the Study Area. Digital mobile maps and 200-scale topographic plots of vegetation polygons were utilized to navigate the survey area. Plant species encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status. When rare plants were encountered, field personnel recorded data points demarcating the edge of polygon surrounding the population and assessed population numbers using a GPS with sub-meter accuracy.

The Data Request Response to DR BIO-24 included GIS shapefiles for CEC staff's review provided via Kiteworks. These files depict at least three areas where the aquatic delineation does not extend 250 feet from the edge of project impacts, as required by California Code of Regulations, title 20, Appendix B (g) (13) (B) (iii), for example at the following locations: 34.4892232, -118.1324951; 34.481079, -118.138441; 34.4848120, -118.1436440; and 34.4901630, -118.1330659.

REV 1 DR BIO-12 Please provide an updated aquatic resources delineation and corresponding map for all areas where a water feature extends from the project impact limits out to 250 feet from the project impacts. This includes, but is not limited to, the following coordinates: 34.4892232, -118.1324951; 34.481079, -118.138441; and 34.4848120, -118.1436440; and 34.4901630, -118.1330659. If field-based data cannot be provided for specific areas via ground-truthing, please include a justification, such as lack of property access, for the omission. A desktop-based delineation is acceptable for this request; however, clearly indicate where field verification (ground-truthing) has not been conducted.

REV 1 DR BIO-12 RESPONSE: An updated aquatic resources delineation and corresponding map are provided to encapsulate the area that is 250 feet out from the project impact limits. Please refer to the redline Section 3.2, Biological Resources subsection 3.2.1.5, Biological Surveys for an updated discussion and Figure 3.2-1, Hydrologic Areas which has been updated to show which areas were ground-truthed versus which areas where desktop delineated.

The Data Request Response to DR BIO-25, includes GIS shapefiles, however, some files appear to be missing.

REV 1 DR BIO-13 Please provide GIS shapefiles reflecting any updates to the waters maps (include updated map), as well as shapefiles for the Crotch's bumble bee and rare plant survey maps. Additionally, provide shapefiles for any other maps described in the data requests (see also **REV 1 DR BIO-5, REV 1 DR BIO-7,** and **REV 1 DR BIO-9.**

REV 1 DR BIO-13 RESPONSE: Requested GIS data uploaded to Kiteworks on December 23, 2025.

3 Land Use

California Code of Regulations, title 20, Appendix B (g) (3) (C) requires the application to discuss the legal status of the parcel(s) on which the project is proposed. If the proposed site consists of more than one legal parcel, the application must describe the method and timetable for merging or otherwise combining those parcels so that the proposed project, excluding linear infrastructure and temporary laydown or staging area, will be located on a single legal parcel.

On August 1, 2025, staff submitted DR LAND-4 (TN 265211) to the docket, which requested documentation of site control for each of the parcels within the project site. On September 4, 2025, the applicant provided a response to DR LAND-4 (TN 265874) that included a table of the terms and conditions of each purchase or lease agreement, and copies of the agreements. On October 23, 2025, the applicant provided an updated response to DR LAND-4 (TN 266803) that updates and supersedes the response provided on September 4, 2025. Staff reviewed the documentation and identified a few parcels for which further clarification is needed regarding the status of lease or purchase agreements.

REV 1 DR LAND-1. Staff have the following questions regarding the information provided in the applicant's response to DR LAND-4 (TN 266803):

1. The applicant's table of lease agreement information (TN 266803, pages 1-2) indicates that the project's north gen-tie would require an easement agreement for APN 3056-017-904. Note that Project application Figure 3.6-2 (APN Map) (TN 264413) illustrates the north gen-tie line crossing through APN 3056-017-905 and APN 3056-017-026, and does not identify any project components being sited within APN 3056-017-904. To resolve this discrepancy, staff request the following information:
    a. Clarify the project components that would be located in APN 3056-017-904.
    b. Confirm which parcels would require easement agreements for the project's north gen-tie line. Provide details on the duration of each easement agreement and the width of each easement.
2. Project application Figure 3.6-2 (APN Map) (TN 264413) indicates that the Point of Change of Ownership (POCO) transmission structure would be located on APN 3056-015-008. However, project application Section 2.3.2.1 states that the POCO structure would be sited on APN 3056-015-023. Please clarify on which parcel(s) the POCO structure would be located.

REV 1 DR LAND-1 RESPONSE:

1(a). There will be no project components located on APN 3056-017-904. The table in TN 266803 incorrectly listed APN 3056-017-904. Below is a table that indicates site control by parcel.

APN	Location	Contract Type	Expiry Date	Supporting Documentation
3056017007	BESS Site	Owned	N/A	Grant Deed
3056017020	BESS Site	Owned	N/A	Grant Deed
3056017021	BESS Site	Owned	N/A	Grant Deed

APN	Location	Contract Type	Expiry Date	Supporting Documentation
3056019013	BESS Site	Purchase Option	7/11/2027	Redacted Purchase Agreement Memo and Amendment
3056019026	BESS Site	Purchase Option	10/2/2026	Redacted Purchase Agreement Memo
3056019037	BESS Site	Owned	N/A	Grant Deed
3056019040	BESS Site	Owned	N/A	Grant Deed
3056015008	North & South Gen-Tie	Purchase Option	8/18/2026	Redacted Purchase Agreement Memo and Amendment
3056015023	North & South Gen-Tie	Purchase Option	10/17/2027	Redacted Purchase Agreement Memo and Redacted 2nd Amendment to Purchase Agreement
3056017027	North & South Gen-Tie	Purchase Option	1/26/2028	Redacted Purchase Agreement Memo and Redacted 1st Amendment to Purchase Agreement
3056017028	North & South Gen-Tie	Purchase Option	1/26/2028	Redacted Purchase Agreement Memo and Redacted 1st Amendment to Purchase Agreement
3056017026	North Gen-Tie	Purchase Option	10/17/2026	Redacted Purchase Agreement Memo and Amendment
3056017905	North Gen-Tie	Easement Agreement	N/A	N/A
3056017906	North Gen-Tie	Easement Agreement	N/A	N/A
3056017016	South Gen-Tie	Purchase Option	9/17/2026	Redacted Purchase Agreement and Redacted 1st Amendment to Purchase Agreement
3056017022	South Gen-Tie	Purchase Option	10/15/2026	Redacted Amended Purchase Agreement Memo
3056027007	South Gen-Tie	Owned	N/A	Grant Deed
3056027031	South Gen-Tie	Purchase Option	9/16/2027	Redacted Purchase Agreement Amendment

1(b). APNs 3056-017-905 and 3056-017-906 would require an aerial easement from the landowner. No project equipment is planned to be installed on either parcel. The aerial easement that is in negotiation with the landowner for APNs 3056-017-905 and 3056-017-906 describes a 150-foot-wide aerial easement for a period of 50 years.

2. Figure 3.6-2 (APN Map) (TN 264413) is correct. Point of Change of Ownership (POCO) transmission structure would be located on APN 3056-015-008. A redlined version of section 2.3.2.1 of the application is provided with this response and has corrected APN of the POCO location to 3056-015-008.

4 Water Resources

On-Site Groundwater Well

Based on consultation with the State Water Resources Control Board, Division of Drinking Water (SWCRB-DDW), and the Los Angeles Regional Water Quality Control Board (LARWQCB), the on-site groundwater production well would need to be evaluated as a public water system pursuant to Section 116275 of the California Safe Drinking Water Act, since it would be used as a potable water source for project employees during operation. If the SWCRB-DDW determines that the on-site groundwater well is not a public water system, local county ordinances regarding requirements for a potable water source may still apply.

In response to DR WATER-2 (TN266609 & TN266610), analytical results of on-site groundwater well sampling were included as Attachment 30, Appendix 3-15C of the Data Request Response 2 submittal. Analysis included general water chemistry, Title 22 metals, microbiological, and radio chemistry constituents. The LARWQCB has commented that additional analysis of on-site groundwater is necessary due to current drinking water characterization requirements, such as beta particle and photon radioactivity pursuant to 22 CCR 64443 and radium 226 and radium 228 pursuant to 22 CCR 64442.

REV 1 DR WATER-1. Please coordinate with the local SWCRB-DDW to assess whether the on-site groundwater production well qualifies as a public water system.

REV 1 DR WATER-1 RESPONSE:

Per the definitions in Section 116275 of the California Safe Drinking Water Act (chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/publicwatersystems/PWS_Definitions.pdf) which is contained in Part 12, Chapter 4 of the California Health and Safety Code, the project does not meet the definition of a public water system. “Public water system” means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:

(1) Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system.

(2) Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system.

(3) Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.

The project will only have 2 service connections (one for each O&M building) and will not serve at least 25 individuals for at least 60 days out of the year (there will be 16 O&M staff onsite daily and a total of 20 O&M staff employed). Because the project water system does not meet the definition of a public water system it will be regulated by Los Angeles County (see California Water Board Decision Tree – www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/class_dec_tree.pdf)

Los Angeles County regulations require that water from new, repaired or reconstructed wells must meet all bacteriological and chemical requirements of the State of California Drinking Water Standards (SDWS) prior to use, as described in the California Code of Regulations (CCR) Title 22. Authority for implementing this requirement is delegated to the County's Department of Health, to be administered through the department's Bureau of Environmental Protection—Drinking Water Program. (Ordinance 2005-0053, adopted by the Los Angeles County Board of Supervisors July 2005) (publichealth.lacounty.gov/eh/docs/permit/requirements-procedures-private-water-wells.pdf). Under Title 11 of Los Angeles County Code Section 11.38 property owners/homeowners must demonstrate through testing that the water on the property complies with current drinking water regulatory limits. The Department recommends that private wells be tested on a regular basis for nitrate, coliform bacteria, and primary inorganic chemicals (i.e. arsenic, lead, copper, etc.) (publichealth.lacounty.gov/eh/docs/permit/well-water-quality-requirements.pdf).

Table 64431-A
Maximum Contaminant Levels
Inorganic Chemicals

Chemical	*Maximum Contaminant Level, mg/L*
Aluminum	1.
Antimony	0.006
Arsenic	0.05
Asbestos	7 MFL*
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Fluoride	2.0
Mercury	0.002
Nickel	0.1
Nitrate (as NO3)	45.
Nitrate+Nitrite (sum as nitrogen)	10.
Nitrite (as nitrogen)	1.
Perchlorate	0.006
Selenium	0.05
Thallium	0.002

The Applicant, CEC staff, and the local SWRCB-DDW met via Teams conference call on November 15, 2025 to discuss the project and the on-site groundwater production well.

On November 18, 2025, the Applicant provided project information to the local SWRCB-DDW demonstrating that the proposed on-site groundwater production well does not meet the definition of a public water system. On December 16, 2025, the Applicant received a response from SWRCB-DDW stating that the project does not meet the definition of a public water system due to having a population of less than 25 people and that the water system would not fall under their regulation. Please refer to Attachment 3 for a record of correspondence between the Applicant and the local SWRCB-DDW to date.

REV 1 DR WATER-2. Please conduct additional sampling of the on-site groundwater well and analyze for the following analytes:

1. Beta particle and photon radioactivity

2. Radium 226 and radium 228

3. Strontium

4. Tritium

5. Pesticides diazinon and propachlor

6. Per- and polyfluoroalkyl substances (PFAS) a. Perfluorobutanesulfonic acid (PFBS)

b. Perfluorohexanesulfonic acid (PFHxS)

c. Perfluorooctanoic acid (PFOA)

d. Perfluorooctanesulfonic acid (PFOS)

e. Perfluorohexanoic Acid (PFHxA)

REV 1 DR WATER-2 RESPONSE: As part of Data Request Response No. 2 (TN# 266605 through 266610), Dudek completed all Title 22 drinking water standard analyses for the domestic well located at 1222 Soledad Canyon Road (1222SC) with no exceedances of drinking water standards (primary or secondary maximum contaminant levels [MCLs]). The Applicant does not believe that the sampling for the additional compounds listed in REV 1 DR WATER-2 would be required by the County of Los Angeles per the information provided in response to REV 1 DR WATER-1. Nevertheless, the applicant has assessed the potential of these compounds to occur in the water system as well as analyzing a new water sample for the requested compounds. The proposed analytes in REV 1 DR WATER-2 primarily result from contamination. Typically, a request for investigation regarding contamination is a result of a suspected or proposed discharge where the RWQCB provides an explanation of the need for the report and evidence that supports the requirement for the additional testing. In this case there has been no suspected waste discharge of contaminants, past or present, and no proposal to discharge in the future.

Based on the lack of historical agricultural use at the site and in the general surrounding area (see Phase I Environmental Site Assessment), Dudek does not anticipate any pesticide impacts to groundwater at the site, including diazinon and propachlor. Moreover, following review of available analytical data reported for nearby municipal drinking water wells (i.e., within 5 miles of the site) on the State Water Resources Control Board (SWRCB) Groundwater Ambient Monitoring and Assessment (GAMA) online database, Dudek confirmed that neither diazinon nor propachlor were detected above laboratory reporting limits in the available data near the site (5 wells sampled for diazinon and 1 well sampled for propachlor). Additionally, numerous pesticides, herbicides, and insecticides including pentachlorophenol, glyphosate, chlordane, and others were tested for as part of the Title 22 drinking water analysis for the domestic well and concentrations of all constituents were non-detect.

PFAS impacts at the site are also not anticipated based on review of the SWRCB online PFAS tracker map. No potential PFAS sources, including airports, bulk fuel terminals/refineries, chrome plating facilities, landfills, or wastewater facilities, are located within 5 miles of the site. The nearest potential source is the Antelope Valley Public Landfill, approximately 5.3 miles north of the site. During a preliminary groundwater PFAS assessment at the landfill (required by Order WQ 2019-0006-DWQ) conducted in November 2019, PFOS was detected at a concentration of 4.8 ng/L slightly exceeding the MCL of 4 ng/L, PFOA was detected at a concentration of 7.8 ng/L exceeding the MCL of 4 ng/L, PFHxS at a concentration of 0.76 ng/L below the MCL of 10 ng/L, PFBS at a concentration of 2.3 ng/L, and PFHxA at a concentration of 9.8 ng/L. The groundwater flow direction was reported to the southeast, crossgradient to the site. Based on the relatively low concentrations of PFAS

downgradient of the landfill and crossgradient to the site and the distance from the site (i.e., greater than 5 miles), PFAS impacts to the site are unlikely.

Finally, although some radionuclides are naturally occurring, elevated concentrations of these are typically associated with bedrock aquifers (i.e., granitic, shale, sandstone) and less common in alluvial sources similar to the hydrogeologic setting at the site. There are no known anthropogenic radionuclide sources (i.e., nuclear power plant or nuclear weapon testing facilities) near the site. Dudek reviewed available radionuclide data for wells nearby the site; the data are summarized below:

- Radium 226 and 228 (combined) were detected at concentrations ranging from 0.15 to 0.64 picocuries per liter (pCi/L) in one well located approximately 4 miles northeast of the site and below laboratory reporting limits in four other nearby wells, all detected concentrations were below the MCL of 5 pCi/L.
- Tritium was detected at concentrations ranging from 4.1 to 9.8 pCi/L in three nearby wells, all detected concentrations were below the MCL of 20,000 pCi/L.
- Strontium-90 analysis was only conducted in one sample from a well approximately 12.9 miles west of the site; strontium-90 was not detected above the laboratory reporting limit in this sample.
- Beta particle and photo radioactivity analyses were not reported in any of the nearby wells on the GAMA database.

Additionally, gross alpha and uranium were measured as part of the Title 22 drinking water analysis for the domestic well and concentrations of both constituents were below their respective MCLs. Nevertheless, the additional sampling requested in REV 1 DR WATER-2 was conducted on November 22, 2025. The sample is currently being analyzed by a laboratory certified by California's Environmental Laboratory Accreditation Program. The laboratory expects results will be available in January 2026. Upon receipt of the results, the Applicant will provide the results from the lab as well as a memorandum summarizing sampling activities and results.

Reference of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

In response to DR WATER-8 (TN266610), a narrative describing the Los Angeles and Lahontan basin plans was added to Subsections: 3.15.1.2, 3.15.1.3.1, and 3.15.5.2, as documented in Attachment 24 (TN 266607, Section 3-15 Water Resource redline version) of the Data Request Response 2 submittal. However, LARWQCB staff noticed some discrepancies for the reference to the Los Angeles and Ventura Counties Watershed Basin Plan in Section 3.15.7.

REV 1 DR WATER-3. Please revise the following details of the Los Angeles Regional Water Quality Control Board's Basin Plan citation in the References Section 3.15.7:

1. The last revision to the basin plan occurred in March 2022 and should be reflected in the reference date.

2. Please make sure your analysis is based on the March 2022 basin plan. Update your analysis accordingly and provide a redline version.

REV 1 DR WATER-3 RESPONSE: Section 3.15, Water Resources, has been revised and updated to reflect the most current amendment to the Basin Plan (2022). In addition, it has been confirmed that the analysis does reflect the recent version of the Basin Plan and no further revisions are necessary. A redlined version of Section 3.15 of the application is provided with this response.

Attachment 1

Redline Section 3.2, Biological Resources and Appendices

3.2 Biological Resources

This section describes the potential effects the construction, operation, and decommissioning activities associated with the Prairie Song Reliability Project (Project) may have on biological resources at and in the vicinity of the Study Area. The Project will consist of an up to 1,150-megawatt (MW), approximately 9,200-megawatt hour (MWh) containerized battery energy storage system (BESS) facility utilizing lithium-iron phosphate cells, or similar technology, operations and maintenance (O&M) buildings, a Project substation, a 500-kilovolt (kV) overhead generation interconnection (gen-tie) transmission line, and interconnection facilities within the existing Southern California Edison (SCE) owned and operated Vincent Substation.

The biological resources described in this section have been compiled from a literature review of databases, maps, general plans, biological reconnaissance, as well as focused species/resource surveys. The evaluation of biological resources includes the following elements:

- Section 3.2.1 describes the existing environment that could be affected, including a regional overview, wetlands, habitats, species, vegetation, and biological survey results.
- Section 3.2.2 identifies potential environmental impacts that may result from Project construction, operation, maintenance, and decommissioning.
- Section 3.2.3 discusses the potential for cumulative effects.
- Section 3.2.4 describes project design and mitigation measures that will be implemented to avoid or minimize potentially significant impacts.
- Section 3.2.5 presents laws, ordinances, regulations, and standards (LORS) applicable to Biological Resources.
- Section 3.2.6 identifies regulatory agency contacts.
- Section 3.2.7 describes permits required for the Project related to Biological Resources.
- Section 3.2.8 provides references used to develop this section.

Biologist's credentials, survey reports, and record data used for the preparation of this section is located in the following appendices:

- Appendix 3.2A – Preliminary ALTA Surveys (unchanged from previous version~~new~~)
- Appendix 3.2B – Potential to Occur Tables and Compendia (**updated** from previous version – redline and clean versions provided)
- Appendix 3.2C – Resumes of Applicant's Biologists (unchanged from previous version~~updated~~)
- Appendix 3.2D – Rare Plant Survey Report (unchanged from previous version~~new~~)
- Appendix 3.2E – California Desert Native Plants Act Survey Report (unchanged from previous version~~new~~)
- Appendix 3.2F – Crotch's Bumble Bee Survey Report (unchanged from previous version~~new~~)
- Appendix 3.2G – Biota Report (updated from previous version – redline version provided~~new~~)
- Appendix 3.2H – Nitrogen Deposition Model (unchanged from original submittal)
- Appendix 3.2I – Photo Exhibit with Key Map (updated from previous version – clean version provided~~new~~)
- Appendix 3.2J – CNDDB Forms (unchanged from original submittal)

- **Appendix 3.2K** – Completed 1602 Lake and Streambed Alteration Agreement Application Package (**updated from previous version – clean version provided**)
- **Appendix 3.2L –** Correspondence with LA County Planning (unchanged from previous version~~new~~)

A summary of the biological resources evaluation is provided in the table below.

		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:					
1	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered, threatened, candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by CDFW or USFWS?	☐	☒	☐	☐
2	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 CDFW or USFWS?	☐	☒	☐	☐
3	Have a substantial adverse effect on federal or state protected WOTUS [waters of the United States] (including wetlands) as defined by Sections 404 and 401 of the 1972 Amendments to the Federal Water Pollution Control Act, commonly known as the Clean Water Act, or the Porter-Cologne Act, either through direct removal, filling, hydrological alteration, or other means?	☐	☒	☐	☐
4	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory native wildlife corridors or impede the use of wildlife nursery sites?	☐	☐	☒	☐
5	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
6	Conflict with the provisions of an adopted Habitat Conservation Plan, NCCP [natural community conservation plan], or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Notes: CDFW = California Department of Fish and Wildlife; USFWS = U.S. Fish and Wildlife Service;

3.2.1 Affected Environment

The Project is in unincorporated Los Angeles County (County), California south of State Route 14 (SR 14) approximately 3 miles northeast of the unincorporated community of Acton. The Project is within the USGS 7.5-minute Acton and Pacifico Mountain Quadrangles, Township 5N, Range 12W, Sections 27, 28, 33 and 34. The

BESS site is comprised of Assessor Parcel Numbers (APNs) 3056-017-007, 3056-017-020, 3056-017-021, 3056-019-013, 3056-019-026, 3056-019-037, and 3056-019-040. Development of the BESS facility will occur on an area of land situated between two (2) existing transportation corridors, the Antelope Valley Freeway (SR 14) to the north and Southern Pacific Railroad lines and Carson Mesa Road to the south, that are approximately 1,200 feet apart.

The Project site (approximately 107.29 acres) refers to the area that will be physically affected by construction activities associated with the Project, including the location of permanent structures (including both gen-tie options) as well as staging and other temporary disturbance areas described in Section 2, Project Description. For the purposes of the biological surveys, the Study Area encompasses the Project site parcels, and it is approximately 414 acres. The Study Area for focused species surveys was expanded per protocol and where necessary to capture nearby resources. Focused survey methods are described below in Section 3.2.1.5, Biological Surveys. Existing conditions within 1,000 feet of the gen-tie route options are similar to the Study Area because there are no significant changes in topography, geology, or hydrology within that distance.

3.2.1.1 Regional Overview

The Study Area is in the western San Gabriel Mountains, in the Transverse Ranges Geomorphic Province (CGS 2002). The Transverse Ranges are an east-west trending series of steep mountains and valleys (CGS 2002). The Study Area is located at the conjunction of Soledad Canyon and Kentucky Springs Canyon (USGS 2022), and at the boundary of the Western Transverse Ranges ecological subregion and Mojave Desert ecological region (Jepson Flora Project 2025). Elevations in the Study Area range from approximately 2,700 feet above mean sea level along the southwestern side to 3,500 feet above mean sea level along the northern hillsides (Google Earth 2025).

The Study Area has an arid climate with the site being located on the northern side of the San Gabriel Mountains and bordering the Antelope Valley. August is the average warmest month with an average high of 93 degrees Fahrenheit (˚F) and December is the coolest month on average with a low of 36 ˚F. Rainfall occurs primarily between November and April, with the maximum average precipitation occurring in February. The mean annual rainfall for the area is approximately 9 inches of rain per year (LACPW 2023).

3.2.1.2 Regional Wetlands and Protected Areas

The National Wetlands Inventory (NWI) and National Hydrography Dataset (NHD) were reviewed to identify wetland or hydrologic features in the Study Area (USFWS 2025a, USGS 2025). Figure 3.2-1, Hydrologic Features, depicts the mapped wetland and hydrologic features in the Study Area. These resources are further described below.

Protected areas within 10 miles of the Study Area were determined through a review of the California Protected Area Database (CPAD) and California Conservation Easement Database (CCED) mapping tools (GreenInfo Network 2025). These resources are further described below.

3.2.1.2.1 Hydrologic Features

The Study Area is in the Santa Clara subbasin (HUC 18070102), Headwaters Santa Clara River watershed (HUC 1807010201), and primarily Kentucky Springs Canyon – Santa Clara River subwatershed, with the western most area of the Project overlapping into the Arrastre Canyon – Santa Clara River subwatershed. The Santa Clara River is the primary natural surface water feature in the vicinity of the Study Area. The Santa Clara River is the largest natural river remaining in Southern California, and travels through two (2) counties, Los Angeles and Ventura

(Kennedy/Jenks Consultants 2014). The northern portion in Los Angeles County is largely classified as an intermittent stream/river and only contains flowing water during certain times of the year (USGS 2023; Kennedy/Jenks Consultants 2014)). The intermittent stream channel traverses the southern end of the Study Area within parcels 3056-019-040, 3056-017-907, 3056-017-028, 3056-017-027, 3056-015-008, and 3056-015-023, as shown in Figure 3.2-1, Hydrologic Features. Several other smaller, unnamed ephemeral washes from Soledad Canyon and Kentucky Springs Canyon drain across the northern and southern portions of the Study Area, respectively. As shown in Figure 3.2-1, hydrological features were delineated within all the Project parcels and offsite within a 250-foot buffer of Project components.

3.2.1.2.2 Protected Areas

CPAD is a database that includes lands that are owned and protected for open space purposed by over 1,000 public agencies or non-profit organizations. CPAD includes national, state, or regional parks, forests, preserves and wildlife areas. It also includes large and small urban parks; land trust preserves and special district open space lands (GreenInfo Network 2025).

A review of the CPAD and CCED confirmed that there are several protected areas or conservation easements within a 10-mile radius of the Study Area (GreenInfo Network 2025), as shown in Figure 3.2-2, Protected Areas. A list of the CPAD and CCED identified areas that occur within the 10-mile buffer of the Project is provided below. Project activities will not generate any potential ground impacts to any conservation easements or protected areas. ~~Parcel~~ APNs: 3056-017-905, 3056-017-904, 3056-017-906, and 3056-017-907 are managed by the Mountains Recreation and Conservation Authority and are deed restricted for open space use, as shown in Figure 3.2-3, Local Protected Areas. The Northern Gen-tie option would obtain an aerial easement and span these parcels, but would not generate any impacts on the ground, except for the use of an existing roadway. In addition, as shown in Figures 3.2-2 and 3.2-3, the CPAD data shows project parcel APN 3056-019-040 as a protected area; however, this is a data error. The project applicant owns this parcel and there are no conservation easements or protected areas stipulated in the deed (see Appendix 3.2A).

California Protected Areas Database

The Mountains Recreation and Conservation Authority's Cold Creek Valley Preserve is within one of the parcels where the northern gen-tie route option occurs (GreenInfo Network 2025). The following are the lands that are owned and protected for open space within 10 miles of the Study Area (GreenInfo Network 2025).

- Antelope Valley Union High School District
  - Highland High School Park
  - Knight High School Park
  - Palmdale High School Park
- California State Lands Commission
  - California State Lands Commission
- Desert and Mountain Conservation Authority
  - Joshua Ranch
  - Littlerock Creek Irrigation District
  - Little Rock Wash
  - Littlerock Creek Irrigation District Open Space

- Los Angeles, County of
  - Acton Park
  - Acton Wash Wildlife Sanctuary
  - Everett Martin Park
  - Jackie Robinson Park
  - Juniper Hills Park
  - Mattie M. Primmer Park
  - Vasquez Rocks Natural Area and Nature Center
- Mountains Recreation and Conservation Authority
  - Bird's Nest
  - Bobcat Canyon
  - Cold Creek Valley Preserve
  - Red Rover Mine TaxDef
  - Ritter Ranch
  - SCC Plum Canyon
  - Stickleback Ranch
  - Unnamed site - Mountains Recreation and Conservation Authority
- Palmdale, City of
  - American Indian Little League Site
  - 70th Street East and North of Avenue R
  - A.C. Warnack Nature Park
  - Anaverde Hills Park
  - Avenue S and Dorer Street
  - Demonstration Garden
  - Desert Sands Park
  - Domenic Massari Park
  - Dr. Robert C. St. Clair Parkway
  - Foothill Park
  - Joe Davies Heritage Airpark
  - Joshua Hills Park
  - Legacy Commons
  - Manzanita Heights
  - Marie Kerr Park
  - Melville J. Courson Park
  - Palmdale Oasis Park
  - Palmdale Park
  - Palmdale Youth Pony League Fields
  - Palmenthol History Park

  - Pelona Vista Park
  - Poncitlan Square
  - Rancho Vista Neighborhood Park
  - Sam Yellen Community Park
  - Sam Yellen Community Park - Undeveloped
  - Tejon Equestrian Park
  - William J. McAdam Park
- Santa Clarita Watershed Recreation and Conservation Authority
  - Rio Dulce Open Space
- Santa Clarita, City of
  - Agua Dulce Canyon Parkland
- The Nature Conservancy
  - Arrastre Canyon
- U.S. Bureau of Land Management
  - BLM Lands
- U.S. Forest Service
  - Angeles National Forest

California Conservation Easement Database

The CCED is a database that defines boundaries of easements and deed-base restrictions on private lands. These lands may be actively farmed, grazed, forested, or held as nature preserves and typically have no public access (GreenInfo Network 2024). No lands with easements and deed-base restrictions are found within 10 miles of the Study Area.

3.2.1.3 Sensitive Habitat Types and Critical Habitat

Sensitive habitat types within a 10-mile radius of the Study Area are shown on Figure 3.2-4, Sensitive Habitat Types, and critical habitats on Figure 3.2-5, Critical Habitat. Descriptions of the sensitive and critical habitats identified are described below.

3.2.1.3.1 Sensitive Habitat Types

The California Department of Fish and Wildlife (CDFW) defines sensitive habitats as plant communities that have limited distributions, high wildlife value, include sensitive species, or are particularly vulnerable to disturbance. CDFW ranks sensitive communities as “threatened” or “very threatened” (CDFW 2018) and keeps records of their occurrences in the California Natural Diversity Database (CDFW 2025a). Currently, CDFW publishes the California Sensitive Natural Communities List online (CDFW 2025b). Vegetation rarity ranking is based on a rank calculated developed by NatureServe (2025). Vegetation maps were taken from the CDFW Vegetation Classification Reports and Maps (CDFW 2025). CDFW’s Vegetation Program considers vegetation alliances with state (S) ranks of S1 through S3 as sensitive vegetative habitats. CDFW considers species or natural communities with one of the following NatureServe rankings as sensitive: Global (G)/State (S); Presumed Extinct (X); Possibly Extinct (G/S H); Critically Imperiled (G/S 1); Imperiled (G/S 2); Vulnerable (G/S 3). The California Environmental Quality Act (CEQA)

requires that potential impacts to sensitive natural communities be evaluated. The following six (6) sensitive natural communities occur within 10 miles of the Study Area (Figure 3.2-4, Sensitive Habitat Types): Mojave Riparian Forest, Southern California Threespine Stickleback Stream, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. None of these identified six (6) sensitive natural communities occur on the project site or are crossed by the gen-tie line routes.

3.2.1.3.2 Critical Habitat

Critical habitats are designated areas occupied by the species at the time it was listed that contain the physical or biological features that are essential to the conservation of endangered and threatened species. In designated critical habitat, U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) consider the following requirements of the species:

"Space for individual and population growth, and for normal behavior; nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing offspring; and, generally, any habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of this species" (USFWS 2025b).

No designated critical habitats occur within the Study Area but three (3) units of critical habitat for arroyo toad (*Anaxyrus californicus*) were identified within 10 miles of the Study Area, as shown in Figure 3.2-5, Critical Habitat (USFWS 2025c). Unit 6c is located approximately 4 miles southwest of the Study Area and is associated with the Santa Clara River. Unit 7 is located approximately 9 miles to the south and is associated with Big Tujunga Creek. Unit 21 is located approximately 5 miles to the east and is associated with Little Rock Creek. Arroyo toad is not expected to occur in the Study Area because the Study Area lacks suitable habitat (low-gradient intermittent streams with sandy, gravelly soils) for the species.

3.2.1.4 Regional Sensitive or Special-Status Species

Endangered, rare, or threatened species, as defined in CEQA Guideline 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status species" in this ~~report~~ section and include (1) endangered, threatened, and candidate species recognized in the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA) (CDFW 2025d); (2) plant species with a California Rare Plant Rank (CNPS 2025a) (lists 1 through 4; see Appendix 3.2B, Potential to Occur Tables and Compendia, for rank definitions); (3) California Species of Special Concern (SSC) and Watch List species, as designated by CDFW (CDFW 2025e); (4) mammals and birds that are Fully Protected species, as described in California Fish and Game Code Sections 4700 and 3511; and (5) Birds of Conservation Concern as designated by USFWS (2021). Additionally, the County of Los Angeles considers plant and wildlife species that are locally important as rare within the county.

Appendix 3.2B provides a list of special-status species with records within the 14 USGS 7.5-minute topographic quadrangles (Lancaster West, Lancaster East, Sleepy Valley, Ritter Ridge, Palmdale, Littlerock, Agua Dulce, Acton, Pacifico Mountain, Juniper Hills, Sunland, Condor Peak, Chilao Flat, and Waterman Mt.) that the Study Area is in and the quadrangles that the 10-mile buffer intersects, as well as the species provided by the query of the USFWS' Information for Planning and Consultation (CDFW 2025a, CNPS 2025a, and USFWS 2025d). Additionally, bird species that the County of Los Angeles considers to be locally important and have the potential to occur in the Study Area region have been included (Los Angeles Audubon 2009). This appendix includes the status designation for each species, habitat types that may support these species in the regional vicinity, a determination of potential for these species to occur within the Study Area, and a rationale for the occurrence determination. Figures 3.2-6a and

3.2-6b, Sensitive or Special-Status Species Records, depicts the special-status plant and wildlife species known to occur within a 10-mile radius of the Project area.

3.2.1.4.1 Sensitive and Special-Status Species Assessment

Dudek biologists evaluated the regional special-status plant and wildlife species against observed conditions on the Study Area to determine the potential for each species to occur. Habitat requirements, occurrence determinations, and rationale for occurrence determination are included in Appendix 3.2B. The potential for each special-status species to occur was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site are unsuitable. The species has a moderate probability of being found on the site.
- **High.** All the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found onsite.
- **Present.** Species was observed on site or within the Study Area.

3.2.1.5 Biological Surveys

Surveys for the BESS and Northern Gen-Tie option portions of the Study Area were conducted in 2023. In 2024 surveys were conducted on the additional parcels for the Southern Gen-Tie option. Dudek conducted comprehensive surveys for sensitive plants for the BESS and Northern Gen-Tie option portions of the Study Area in the spring of 2023 following an above average wet season. Dudek conducted surveys for Crotch's bumble bee (*Bombus crotchii*) in the summer of 2024 on the BESS and Northern Gen-Tie option portions of the Study Area. Dudek is currently conducting supplemental rare plant surveys and Crotch's bumble bee surveys in 2025 for parcels associated with the Southern Gen-Tie option of the Study Area. Table 3.2-1, Schedule of Surveys, lists the dates, conditions, and focus for each survey. While most surveys were conducted within the entire Study Area, Figure 3.2-7, Biological Surveys, depicts the areas for the surveys that deviated from the Study Area. Appendix 3.2C, Resumes of Applicant's Biologists, has resumes for the Dudek staff that conducted the surveys.

Table 3.2-1. Schedule of Surveys

Date	Focus	Biologists	Time	Survey Conditions
1/6/2023	▪ Vegetation Mapping ▪ Jurisdictional Delineation	MM, ES	7:30 AM–2:55 PM	38°F–52°F; 0–10% cloud cover; 1–8 mph wind

Table 3.2-1. Schedule of Surveys

Date	Focus	Biologists	Time	Survey Conditions
1/11/2023	▪ Vegetation Mapping ▪ Jurisdictional Delineation	MM, ES	Not recorded	Not recorded
1/12/2023	▪ Vegetation Mapping ▪ Jurisdictional Delineation	MM, ES	Not recorded	Not recorded
4/28/2023	▪ Rare Plants	VG, TP	6:40 AM–3:04 PM	60°F–80°F; 0% cloud cover; 0–2 mph wind
4/28/2023	▪ Rare Plants	TP	6:40 AM–2:46 PM	57°F–94°F; 0% cloud cover; 0–2 mph wind
5/1/2023	▪ Rare Plants	CB, DM, SN, JR	7:30 AM–3:25 PM	48°F–61°F; 60%–90% cloud cover; 3–5 mph wind
5/2/2023	▪ Rare Plants	DM, VG, SN, JR	7:30 AM–3:25 PM	48°F–70°F; 60%–90% cloud cover; 3–5 mph wind
6/12/2024	▪ Crotch's Bumble Bee	CA, AC, SL, KN	9:30 AM–10:17 AM	74°F–80°F; 0% cloud cover; 0–4 mph wind
6/22/2023-7/7/2023	▪ Protected Tree Mapping	AC, ST, AP	Not recorded	Not recorded
7/1/2024	▪ Crotch's Bumble Bee	LB, JE, DS	7:41 AM–1:34 PM	73°F–90°F; 0% cloud cover; 0–8 mph wind
7/2/2024	▪ Crotch's Bumble Bee	JE	7:02 AM–9:07 AM	70°F–81°F; 1–7 mph wind
7/23/2024	▪ Crotch's Bumble Bee	LB	7:27 AM–10:54 AM	80°F–95°F; 0%–50% cloud cover; 0–1 mph wind
7/24/2024	▪ Crotch's Bumble Bee	LB	7:18 AM–11:01 AM	80°F–95°F; 0% cloud cover; 0–2 mph wind
11/18/2024	▪ Vegetation Mapping ▪ Jurisdictional Delineation	ES, ZP	8:50 AM-12:56 PM	49°F–56°F; 0% cloud cover; 5–16 mph wind
11/19/2024	▪ Vegetation Mapping ▪ Jurisdictional Delineation	TP, RS	9:30 AM–3:35 PM	53°F–54°F; 0% cloud cover; 1–7 mph wind
2/26/2025	▪ Raptor Nest Survey	TP. RS	8:28 AM-3:30 PM	63°F–78°F; 0% cloud cover; 2–15 mph wind

Table 3.2-1. Schedule of Surveys

Date	Focus	Biologists	Time	Survey Conditions
4/16/2025	▪ Crotch's Bumble Bee	CA, ES	8:21 AM–1:08 PM	48°F–59°F; 30%–100% cloud cover; 0–3 mph wind
5/21/2025	▪ Crotch's Bumble Bee	CA, ES	8:21 AM–1:08 PM	59°F–71°F; 0% cloud cover; 0–1 mph wind
6/5/2025	▪ Rare Plants	RSw	7:00AM–12:00AM	84°F; 0% cloud cover; 0–5 mph wind
6/30/2025	▪ Crotch's Bumble Bee	ES, LB	9:16 AM–1:30 PM	79°F–86°F; 0% cloud cover
8/22/2025	▪ Jurisdictional Delineation	ES, RS	Not recorded	Not recorded

Notes:
Biologists: AC=Aida Castro, AP=Ana Pfleeger, CA=Callie Amoaku, LB=Luz Badillo, CB= Chelsea Bowers-Doerning, AC=Anna Cassidy, JE=Joshua Elson, VG=Valerie Goodwin, SL=Sony Leming, DM=Dilip Mahto, MM=Max Murray, KN=Kimberly Narel, SN=Sandra Nash, TP=Tracy Park, ZP=Zarina Pringle, JR=Jacob Rogers, ES=Eilleen Salas, DS=Dahlia Serrato, RS=Ryan Stanley, RSw=Robert Sweet; ST=Sarah Tian
Survey Conditions: °F=degrees Fahrenheit; mph=miles per hour

Vegetation Community and Land Cover Mapping

Vegetation communities and land uses within the Study Area were mapped in the field using the Environmental Systems Research Institute (Esri) Collector, a mobile data collection application, on a digital aerial-based background (Esri 2025). Following completion of the fieldwork, all vegetation linework was finalized using Esri ArcGIS software and GIS coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover type within the study area was determined. Vegetation communities within the study area were mapped using CDFW's List of Vegetation Alliances and Associations (or California Natural Community List) (CDFW 2025e), which is based on A Manual of California Vegetation, Second Edition (Sawyer et al. 2009) and A Manual of California Vegetation, Online Edition (CNPS 2025b), where feasible, with modifications made to accommodate the lack of conformity of the observed communities (e.g., developed/disturbed land cover types) using Oberbauer et al. (2008) and Jones and Stokes (1993). Vegetation communities were classified based on site factors, descriptions, distribution, and characteristic species present within an area. Each natural community was mapped to the association level, where feasible. Special-status vegetation communities are those communities identified as high priority for inventory in the California Natural Communities List (CDFW 2025b).

Rare Plant Surveys

The rare plant surveys were guided by the CNPS Botanical Survey Guidelines (CNPS 2001) and CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Sensitive Natural Communities (CDFW 2018). The biologists walked transects in suitable habitat, spaced approximately 5 meters to 10 meters apart based on the density of vegetative cover, throughout the Study Area. Digital mobile maps and 200-scale topographic plots of vegetation polygons were utilized to navigate the survey area. Plant species encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status. When rare plants were encountered, field personnel recorded data points demarcating the edge of polygon surrounding the population and assessed population numbers using a GPS with sub-meter accuracy. Appendix 3.2D, Rare Plant Survey Report, has additional details on the surveys.

California Desert Native Plants Act

Dudek biologists conducted a focused desert native plant survey within the survey area (defined as the Project impact footprint and a 150-foot buffer, where accessible). The desert native plant survey was focused on the species subject to the California Desert Native Plants Act. Biologists walked meandering transects spaced approximately 10 meters apart to obtain 100% visual coverage of the survey area. If desert native plants identified under the California Desert Native Plants Act were encountered, field personnel recorded data points using a GPS with sub-meter accuracy (i.e., Trimble® GeoXT) and a data dictionary. The data dictionary included, at a minimum, the species name, the number of individuals, and the botanist collecting the data. The survey methodology and results were documented in a memorandum, with figures illustrating the location of the mapped desert native plants and representative photos of the species. Appendix 3.2E, California Desert Native Plants Act Survey Report, has additional details on the surveys.

Crotch's Bumble Bee Surveys

The surveys for Crotch's bumble bee were conducted in accordance with the CDFW survey guidance (CDFW 2023a). The survey passes were led by Callie Amoaku, who holds a Memorandum of Understanding (MOU) and Scientific Collecting Permit (SCP) to capture Crotch's bumble bee. Dudek conducted five protocol level surveys for Crotch's bumble bee in June and July 2024 (June 12, July 1, July 2, July 23, and July 24) and two in April and May 2025 (April 16 and May 21). The surveys were split across 2 years because the Project owner did not have access to the entire Project gen-tie area during the 2024 surveys. The 2024 surveys were conducted from June through July, during the Colony Active Period of April through August, which according to CDFW guidelines had the highest detection period, and were spaced between 2 and 4 weeks apart. The three 2025 surveys, which covered the remainder of the Project site and the BESS location, were conducted between April and June, which is during the Colony Active Period. The 2025 surveys were spaced 4 weeks apart to cover a wider period during the Colony Active Period while also meeting recommended guidelines. Appendix 3.2F, Crotch's Bumble Bee Survey Report, has additional details on the surveys.

The surveys were conducted during optimal conditions when there were sunny to partly sunny skies that were greater than 60° Fahrenheit. Suitable habitat within the Study Area was visually surveyed for 1 person-hour per 3 acres of potential habitat. Biologists walked wandering transects through these resources with a goal of observing bumble bees in passing and observing bumble bee nest sites associated with small mammal burrow or other appropriate soil cavities.

Raptor Nest Surveys

Surveys for nesting raptors (i.e., eagles, hawks, kites, falcons, and owls) were conducted in early 2025. Dudek biologists conducted a 1-day survey for the Study Area and a 500-foot buffer, with a focus on areas with larger trees and shrubs, residential areas with large ornamental trees, and transmission towers that have potential to support raptor nests.

Aquatic Resources Delineation

Prior to conducting the jurisdictional delineation, USFWS National Wetland Inventory data (USFWS 2024a) was reviewed to determine if the Study Area contained any features mapped by the USFWS. Site-specific topographical data was reviewed in conjunction with aerials, both current and historical, to determine the potential presence of non-wetland waters. Current vegetation mapping was reviewed to assess whether the Study Area supported

hydrophytic vegetation and potential wetlands. Jurisdictional boundaries were mapped in the field using ESRI Collector on a mobile device with submeter accuracy, where access was available. Remote sensing was not used for the delineation, with the exception of some areas within the 250-foot buffer which were delineated via desktop-based delineation only due to access restrictions. Figure 3.2-1 shows which areas were delineated via ground-truthing and which areas were delineated via desktop only.

U.S. Army Corps of Engineers – Potential Waters of the U.S.

The U.S. Army Corps of Engineers (USACE) wetlands delineation was conducted in accordance with the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008a). A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b) was used to determine the limits of non-wetland waters. Non-wetland waters were delineated on aerial maps in conjunction with ESRI Collector on a mobile device. The widths of each non-wetland water were determined in the field according to the OHWM manual. USACE OHWM Forms were completed at representative cross-sections of non-wetland waters to capture their characteristics and widths.

Regional Water Quality Control Board – Potential Waters of the U.S. and Waters of the State

Waters of the state regulated by the RWQCB were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2021). As described in these procedures, wetland waters of the state are mapped based on the procedures in USACE's 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters are mapped at the OHWM based on the procedures defined in USACE's 2008 A Field Guide to Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b).

California Department of Fish and Wildlife – Streams

Potential CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code Section 1602. Streambeds under the jurisdiction of CDFW were delineated using the Cowardin method of waters classification, which defines waters boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (Cowardin et al. 1979).

Protected Tree Census

The portions of the Study Area east of the railroad tracks, south of Foreston Drive and the Southern California Edison (SCE) Vincent Substation, and east of the SCE substation are within a County of Los Angeles Significant Ecological Area (SEA) (County of Los Angeles 2025), as shown in Figure 3.2-8, Los Angeles County Significant Ecological Area. The County's SEA Ordinance includes 60 tree species to be protected, including all sizes of California juniper (*Juniperus californica*) (Los Angeles County Planning 2020). Dudek biologists mapped the California juniper within the SEA portions of the Study Area. Field personnel recorded data points and circumference for each individual plant using a mobile device with sub-meter accuracy. An evaluation of existing health for each California juniper was conducted. Appendix A, Protected Tree Report, of Appendix 3.2G, Biota Report, has additional details on the census. An additional tree survey was conducted in December 2025 to include additional areas within the SEA and to confirm that no blue elderberry (*Sambucus nigra* ssp. *Caerulea*) occurs within the SEA portion of the Study Area. The survey confirmed that no blue elderberry occurs within the Study Area. During the December 2025

survey, additional previously unidentified SEA-protected trees were recorded and mapped: velvet ash (*Fraxinus velutina*) and Southern California black walnut (*Juglans californica*).

3.2.1.6 Nitrogen Deposition Model

A nitrogen deposition analysis was performed to assess the proposed Project's potential operational impact on biological resources within 6 miles of the Study Area and is included as Appendix 3.2H, Nitrogen Deposition Model. During operation, there will be periodic emissions of oxides of nitrogen (NO_x), from the testing and maintenance of three (3) emergency diesel generators (one [1] rated at 323 horsepower [hp] and two [2] rated at 744 hp). These emissions will result in nitrogen deposition around the Project site. To determine the potential impacts during operation, the American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model (AERMOD) Version 24142 was used to model the concentration of nitrogen around the Project site using wet and dry deposition algorithms. The generators would meet the U.S. Environmental Protection Agency (EPA) Tier 4 standards based on the equipment specification sheets and were each assumed to operate up to 50 hours per year for testing and maintenance. Ammonia (NH_3) is a product of combustion with equipment having selective catalytic reduction (SCR) equipment. As the generators would be equipped with SCR, emissions of NH_3 were estimated and added to the NO_x emissions for total nitrogen emissions. Principal parameters of this modeling are presented in Table 3.2-2, AERMOD Principal Parameters – Nitrogen Deposition.

Table 3.2-2. AERMOD Principal Parameters – Nitrogen Deposition

Parameter	Details
Dispersion Model	The air dispersion model used was AERMOD Version 24142, with the Lakes Environmental Software implementation/user interface, AERMOD View, Version 13.0.0.
Meteorological Data	The latest 5-year meteorological data (2016-2020) for the Palmdale Station (KPMD) were obtained from CARB and used in the analysis as the most representative data set based on proximity and wind direction. The input data was also conservative, based on a test run that compared maximum concentrations using the Palmdale Station to the concentrations using the Santa Clarita Station (the other station in general proximity to the Project) meteorological data.
Urban versus Rural Option	Urban areas typically have more surface roughness, as well as structures and low-albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. Based on the land use procedure from 4.4.1 of the OEHHA Guidance Manual, the rural dispersion was appropriate for the Project site (OEHHA 2015).
Terrain Characteristics and Elevation Data	Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate, and elevations were assigned to the emission sources and receptors. Digital elevation data were obtained through AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with an approximately 1 arc-second resolution.
Emission Sources and Release Parameters	The diesel generators were modeled as point sources with release parameters based on the specification sheets and default diesel-fired internal combustion stack parameters (SBCAPCD 2025), if generator specific information was not available. The 323 hp generator was modeled with a vertical stack height of 3.0 meters, inside stack diameter of 0.13 meters, gas exhaust temperature of 780 Kelvin, and gas exhaust velocity of 63.9 meters per second. Each 744 hp generator was modeled with a vertical stack height of 3.7 meters, inside stack diameter of 0.2 meters, gas exhaust temperature of 719.82 Kelvin, and gas exhaust velocity of 14.05 meters per second.
Receptors	A telescoping grid of receptors was generated with the following spacing to evaluate potential nitrogen deposition impacts within a 6-mile radius of the Project:

Table 3.2-2. AERMOD Principal Parameters – Nitrogen Deposition

Parameter	Details
	▪ 25-meter spacing on the facility boundary ▪ 25-meter spacing from the facility boundary out to 100 meters ▪ 50-meter spacing from 100 meters to 250 meters ▪ 100-meter spacing from 250 meters to 500 meters ▪ 250-meter spacing from 500 meters to 1,000 meters ▪ 500-meter spacing from 1,000 meters to 2,000 meters ▪ 1,500-meter spacing from 2,000 meters to 8,000 meters
Gas Deposition	The vegetation in the region is primarily grassland and shrubland. These vegetation categories are classified as "Land Use Category" of "3 – Rangeland" in AERMOD.
NOx to NO_2 Conversion	A 100% conversion of NO_x and NH_3 into atmospherically derived nitrogen (Tier 1).
Gas and Particle Deposition	Nitric acid was assumed for the gas deposition parameters as it has a strong affinity for impacts to soils and vegetation. The default deposition velocity and parameters (pollutant reactivity factor and seasons) were assumed. The following gas deposition parameters were assumed: ▪ Pollutant Diffusivity in Air: 0.1628 cm^2/s ▪ Pollutant Diffusivity in Water: 2.98E-05 cm^2/s ▪ Cuticular Resistance: 100,000 s/cm ▪ Henry's Law Constant: 8E-08 $Pa\text{-}m^3/mol$

Source: OEHHA 2015; SBCAPCD 2025.
Notes: AERMOD = American Meteorological Society/EPA Regulatory Model; hp = horsepower. $Pa\text{-}m^3/mol$ = pascal-meters cubed per mole; NH_3 = ammonia; NOx = oxides of nitrogen; s/cm = seconds per centimeter.
See Appendix 3.2H, Nitrogen Deposition Model, for additional information.

The AERMOD model calculates atmospheric deposition of nitrogen by calculating the wet and dry fluxes of total nitrogen. This deposition is accomplished by using a resistance model for the dry deposition part, and by assigning particle phase washout coefficients for the wet removal process from rainout. As discussed above, depositional parameters for nitric acid are input into the model to calculate the deposition of nitrogen. AERMOD sums the results of the wet and dry nitrogen deposition to produce annual deposition rates in units of grams per square meter (g/m^2) for the entire 5-year meteorological period modeled, which are converted to kilograms per hectare per year (kg/ha/yr) for comparison to critical loads of nitrogen for biological resources within 6 miles of the Study Area. As discussed in detail below, the testing and maintenance operation of the Project's emergency backup generators will not lead to nitrogen deposition levels that exceed recognized thresholds and will thus result in less than significant impacts to natural vegetation communities and special status species.

3.2.1.7 Vegetation Communities and Land Cover Types

All plant species encountered during the field reconnaissance surveys and jurisdictional delineations were identified and recorded. Latin and common names for plant species with a California Rare Plant Rank (formerly California Native Plant Society List) follow the California Native Plant Society On-Line Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2025a). For plant species without a California Rare Plant Rank, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2025) and common names follow the California Natural Community list (CDFW 2025e) or the U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS) Plants Database (NRCS 2025). A list of plant species observed in the Study Area during initial surveys is presented in Appendix 3.2B. Representative photos of the vegetation communities can be found in Appendix 3.2I, Photo Exhibit.

Six (6) vegetation communities are considered sensitive by CDFW. The vegetation communities and land cover locations are summarized in Table 3.2-3, Vegetation Communities and Land Covers in the Study Area, and illustrated in Figure 3.2-9, Vegetation Communities and Land Cover. Vegetation communities within 1,000 feet of the gen-tie route options are expected to be similar to the Study Area because there are no significant changes in topography, geology, or hydrology within that distance.

Table 3.2-3. Vegetation Communities and Land Covers in the Study Area

Alliance	Association	CDFW Sensitive[1]	Ranking[2]	Acres
Native Communities				
Cheesebush – sweetbush scrub	*Ambrosia salsola - Larrea tridentata*	No	G4/S4	0.82
	Ambrosia salsola Association	No	G4/S4	2.60
Fiddleneck - phacelia fields	*Amsinckia menziesii - Erodium* spp.	No	G5/S5	2.21
California sagebrush – (purple sage) scrub	*Artemisia californica - Eriogonum fasciculatum*	No	G4/S4	12.68
Big sagebrush	*Artemisia tridentata - Ericameria nauseosa*	No	G5/S5	15.42
	Artemisia tridentata - Eriogonum fasciculatum	No	G5/S5	3.98
	Artemisia tridentata	No	G5/S5	0.48
	Artemisia tridentata ssp. *parishii*	Yes	G2/S2	7.66
Fourwing saltbush scrub	*Atriplex canescens*	No	G5/S4	75.57
Mormon tea scrub	*Ephedra viridis*	No	G4/S4	20.87
Rubber rabbitbrush scrub	*Ericameria nauseosa - Juniperus californica* / herb	No	G5/S5	18.49
	Ericameria nauseosa	No	G5/S5	5.38
California buckwheat scrub	*Eriogonum fasciculatum*	No	G5/S5	4.75
	Eriogonum fasciculatum var. *foliolosum - Juniperus californica*	Yes	G3/S3	4.50
California buckwheat – Parish's goldeneye scrub	*Eriogonum fasciculatum* rock outcrop	Yes	Unranked	3.82
California walnut groves	*Juglans californica / annual herbaceous*	Yes	G3/S3	0.89
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum - Eriogonum fasciculatum*	Yes	Unranked	31.66
	Juniperus californica / herbaceous	Yes	Unranked	106.67
	Juniperus californica / Eriogonum fasciculatum - Artemisia californica	No	G5/S5	0.23
			Subtotal:	*317.35*
Naturalized (Non-Native)				
Wild oats and annual brome grasslands.	*Avena barbata - Bromus hordeaceus*	No	GNA/SNA	2.22
Red brome or Mediterranean grass grasslands	*Bromus rubens* - mixed herbs	No	GNA/SNA	2.99
			Subtotal:	*5.21*

Table 3.2-3. Vegetation Communities and Land Covers in the Study Area

Alliance	Association	CDFW Sensitive[1]	Ranking[2]	Acres
Land Cover Types				
Disturbed habitat	Not applicable	No	NA/NA	19.38
Urban/Developed	Not applicable	No	NA/NA	71.95
			Subtotal:	*91.33*
			Total:	**413.88**

Notes: Totals may not sum due to rounding.

1 CDFW has determined the community to be sensitive.

2 The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, S = state). The numbers have the following meaning:
1 = critically imperiled
2 = imperiled
3 = vulnerable to extirpation or extinction
4 = apparently secure
5 = demonstrably widespread, abundant, and secure
NA = not applicable
GNA = global rank not applicable
SNA = state rank not applicable
Unranked= Associations that are considered sensitive, but have not been ranked

Native Vegetation Communities

Vegetation community descriptions are taken from A Manual of California Vegetation, Online Edition (CNPS 2025b).

Cheesebush – Sweetbush Scrub

Cheesebush – sweetbush scrub (*Ambrosia salsola – Bebbia juncea* Shrubland Alliance) has cheesebush (*Ambrosia salsola*), sweetbush (*Bebbia juncea*), woolly brickellbush (*Brickellia incana*), and/or desertsenna (*Senna armata*) as dominant or co-dominant in the shrub canopy with Wiggins' cholla (*Cylindropuntia echinocarpa*), brittlebush (*Encelia farinosa*), California jointfir (*Ephedra californica*), Mojave rabbitbrush (*Ericameria paniculata*), California buckwheat (*Eriogonum fasciculatum*), white ratany (*Krameria grayi*), creosote bush (*Larrea tridentata*), and beavertail pricklypear (*Opuntia basilaris*). This alliance can be found on intermittently flooded channels, arroyos, washes, valleys, flats, and rarely flooded low-gradient deposits. Soils are alluvial, sandy and gravelly, and disturbed desert pavement. Two (2) associations of the alliance were mapped within the Study Area: *Ambrosia salsola – Larrea tridentata* and *Ambrosia salsola* association. These associations were mapped in the gen-tie portion Study Area.

Fiddleneck – Phacelia Fields

Fiddleneck – phacelia fields (*Amsinckia* [*menziesii*, *tessellata*] – *Phacelia* spp. Herbaceous Alliance) has Menzies' fiddleneck (*Amsinckia menziesii*), bristly fiddleneck (*Amsinckia tessellate*) and/or *Phacelia* spp. or other *Amsinckia* sp. as seasonally co-dominant in the herbaceous layer. Additional local species present include California saltbush (*Atriplex californica*), *Avena* spp., ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), red brome (*Bromus rubens*), exserted Indian paintbrush (*Castilleja exserta*), and *Erodium* spp. Emergent shrubs may be present at low cover. This alliance can be found along upland slopes, broad valleys, ocean bluffs, grazed or recently burned hills, fallow fields. Soils are well drained and loamy, and they are often subject to high levels of disturbance. One (1) association of the alliance, *Amsinckia menziesii – Erodium* spp., was mapped in the BESS portion of the Study Area.

California Sagebrush – (Purple Sage) Scrub

California sagebrush – (purple sage) scrub (*Artemisia californica* – [*Salvia leucophylla*] Shrubland Alliance) has California sagebrush (*Artemisia californica*) and/or purple sage (*Salvia leucophylla*) as dominant or co-dominant in the shrub canopy with chamise (*Adenostoma fasciculatum*), coyotebrush (*Baccharis pilularis*), bladderpod spiderflower (*Cleome isomeris*), orange bush monkeyflower (*Diplacus aurantiacus*), California brittlebush (*Encelia californica*), brittlebush, California jointfir, narrowleaf goldenbush (*Ericameria linearifolia*), California buckwheat, and chaparral yucca (*Hesperoyucca whipplei*). This alliance can be found on slopes of variable aspects, but usually steep and rarely flooded, low-gradient deposits along streams. Soils are alluvial or colluvial derived. One (1) association of the alliance, *Artemisia californica – Eriogonum fasciculatum*, was mapped in the gen-tie portion Study Area.

Big Sagebrush

Big sagebrush (*Artemisia tridentata* Alliance) has big sagebrush (*Artemisia tridentata*) as dominant or co-dominant in the shrub canopy with Acton's encelia (*Encelia actoni*), Mormon tea (*Ephedra viridis*), and California buckwheat (*Eriogonum fasciculatum*). Shrub canopy is open to continuous and emergent trees may be present at low cover. The herbaceous layer is usually sparse to intermittent and grassy. This alliance can be found on plains, alluvial fans, bajadas, pediments, lowers slopes, valley bottoms, seasonal and perennial stream channels, and dry washes. Soils are well drained and consist of loam or sand. Three (3) associations of the alliance were mapped within the Study Area: Artemisia tridentata Association, Artemisia tridentata-*Eriogonum fasciculatum* Association, and *Artemisia tridentata-Ericameria nauseosa* Association. These associations were found in the BESS and Southern Gen-tie portions of the Study Area.

Fourwing Saltbush Scrub

Fourwing saltbush scrub (*Atriplex canescens* Shrubland Alliance) has fourwing saltbush (*Atriplex canescens*) as dominant or co-dominant in the shrub canopy with burrobush (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), spiny saltbush (*Atriplex confertifolia*), cattle spinach (*Atriplex polycarpa*), Mormon tea, hop sage (*Grayia spinosa*), and creosote bush (*Larrea tridentata*). Emergent trees may be present at low cover This alliance can be found along playas, old beach and shores, lake deposits, dissected alluvial fans, rolling hills or channel beds. Soils are carbonate rich, alkaline, sandy, or sandy clay loams. One (1) association, *Atriplex canescens*, was mapped in the gen-tie portion Study Area.

Mormon Tea Scrub

Mormon tea scrub (*Ephedra viridis* Shrubland Alliance) has Mormon tea as dominant or co-dominant in the shrub canopy with big sagebrush and rubber rabbitbrush (*Ericameria nauseosa*). Emergent trees may be present at low cover, including California juniper. This alliance can be found along ridges, hills, mountains, and channel beds. Soils are shallow derived from alluvium, granitic substrate, bedrock, colluvium. One (1) association, *Ephedra viridis*, was mapped primarily in the BESS portion of the Study Area.

Rubber Rabbitbrush Scrub

Rubber rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance) has rubber rabbitbrush as dominant or co-dominant in the shrub canopy with big sagebrush, *Ephedra* spp., and California buckwheat. Emergent trees may be present at low cover, including California juniper. This alliance can be found along all topographic settings,

especially in disturbed settings. Soils are well-drained sands and gravels. Two (2) associations, *Ericameria nauseosa* and *Ericameria nauseosa-Juniperus californica/*herb, were mapped within the BESS and gen-tie portions of the Study Area.

California Buckwheat Scrub

California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance) has California buckwheat or chaparral yucca as dominant or co-dominant in the shrub canopy in cismontane stands with California sagebrush, coyotebrush, orange bush monkeyflower, California brittlebush, brittlebush, and Menzies' goldenbush (*Isocoma menziesii*). Emergent trees may be present at low cover, including California juniper. This alliance can be found in upland slopes, intermittently flooded arroyos, channels and washes, and rarely flooded low-gradient deposits. Soils are coarse, well drained, and moderately acidic to slightly saline. Two (2) associations, *Eriogonum fasciculatum* and *Eriogonum fasciculatum* var. *foliolosum – Juniperus californica*, were mapped in the BESS and north of the Vincent Substation portions of the Study Area.

California Buckwheat – Parish's Goldeneye Scrub

California buckwheat – Parish's goldeneye scrub (*Eriogonum fasciculatum – Viguiera parishii* Shrubland Alliance) has California buckwheat and/or Parish's goldeneye (*Viguiera parishii*) as dominant or co-dominant in the shrub canopy with burrobush (*Ambrosia dumosa*), cheesebush, big sagebrush (*Artemisia tridentata*), sweetbush, blackbrush (*Coleogyne ramosissima*), buck-horn cholla (*Cylindropuntia acanthocarpa*), Wiggins' cholla, brittlebush, and Nevada jointfir (*Ephedra nevadensis*). This alliance can be found in wash and arroyo margins, rocky to bouldery alluvium, canyons, and moderate to steep colluvial slopes and ridges. Soils are well drained and derived from granitic or volcanic rock. One (1) association, *Eriogonum fasciculatum* rock outcrop, was mapped north of the Vincent Substation in the Study Area.

California Walnut Groves

California walnut groves (*Juglans californica* Forest and Woodland Alliance) have Southern California walnut (*Juglans californica*) as dominant or co-dominant in the tree canopy with other native trees. One (1) association, *Juglans californica/*annual herbaceous, was mapped adjacent to residential property (possibly ornamental plantings in origin) north of the Vincent Substation in the Study Area.

California Juniper Woodland

California juniper woodland has California juniper as dominant or co-dominant in the small tree canopy with single-leaf pinyon (*Pinus monophyla*) and blue oak (*Quercus douglasii*). Local shrubs may include big sagebrush *Ephedra* spp., chaparral yucca, and scale broom (*Lepidospartum squamatum*). This alliance can be found along ridges, slopes, valleys, alluvial fans, and valley bottoms. Soils are porous, rocky, coarse, sandy, or silty, and are often very shallow. Three (3) associations, *Juniperus californica*, *Juniperus californica-Adenostoma fasciculatum-Eriogonum fasciculatum*, and *Juniperus californica-Ericameria linearifolia/*annual-perennial herb, were mapped within the BESS and gen-tie portions of the Study Area.

Naturalized (Non-Native) Vegetation Communities

Wild oats and Annual Brome Grasslands

Wild oats and annual brome grasslands (*Avena* spp.-*Bromus* spp. Herbaceous Semi-Natural Alliance) has slender oat (*Avena barbata*), common wild oat (*Avena fatua*), stiff brome (*Brachypodium distachyon*), greater quaking-grass (*Briza maxima*), great brome, soft brome (*Bromus hordeaceus*) and/or wall barley (*Hordeum murinum*) as dominant or co-dominant with other non-natives in the herbaceous layer. Emergent trees and shrubs may be present at low cover. This alliance can be found along all topographic settings in foothills, waste places, rangelands, and openings in woodlands. One (1) association, *Bromus hordeaceus-Amsinckia menziesii-Hordeum murinum*, was mapped adjacent to the Vincent Substation in the Study Area.

Red Brome or Mediterranean Grass Grasslands

Red brome or Mediterranean grass grasslands (*Bromus rubens* – *Schismus* [*arabicus*, *barbatus*] *Bromus rubens* Alliance) has red brome, Arabian schismus (*Schismus arabicus*), and/or common Mediterranean grass (*Schismus barbatus*) as dominant or co-dominant with other non-natives in the herbaceous layer. Emergent shrubs may be present at low cover. This habitat can be found in all topography settings and soil textures. One (1) association, *Bromus rubens* – mixed herbs, was mapped adjacent to the Vincent Substation in the Study Area.

Disturbed and Developed Land Cover Types

Disturbed Habitat

Although not recognized by the Manual of California Vegetation, Online Edition (CNPS 2025b) or the Natural Communities List (CDFW 2025e), disturbed habitat is described in the Draft Vegetation Communities of San Diego County (Oberbauer et. al. 2008). Disturbed habitat is described as areas generally lacking vegetation due to high levels of existing or historical human disturbance and are no longer recognizable as a native or naturalized vegetation association. Areas mapped as disturbed habitat may include unpaved roads, trails, and graded areas (Oberbauer et. al. 2008). Vegetation in these areas, if present at all, is usually sparse and dominated by non-native weedy herbaceous species (Oberbauer et. al. 2008). Areas mapped as disturbed habitat were found throughout the Study Area and were usually associated with developments or infrastructure.

Urban/Developed

Although not recognized by the Manual of California Vegetation (CNPS 2025b) or the Natural Communities List (CDFW 2025e), the urban/developed mapping unit (or developed land) is described in Draft Vegetation Communities of San Diego County (Oberbauer et. al. 2008). This mapping unit describes areas supporting human-made structures, including homes, yards, sidewalks, and other highly modified lands supporting structures associated with dwellings or other permanent structures. Vegetation in these areas, if present at all, is typically associated with ornamental landscaping that has been included in the development footprint (Oberbauer et. al. 2008). Most of the developed lands in the Study Area included the large, paved substation and roads.

3.2.1.8 Potential Jurisdictional Aquatic Resources

Approximately 3.80 acres of potential jurisdictional waters regulated by RWQCB and CDFW were found within the Study Area, as summarized in Table 3.2-4, Summary of Potential Jurisdictional Waters Within the Study Area, and

illustrated in Figure 3.2-1, Hydrologic Features. Impacts to these features will require permits from the RWQCB and CDFW before any Project activities take place. Based upon the current definition of waters of the U.S. per the Clean Water Act, no features were considered to be water of the U.S. under the jurisdiction of the U.S. Army Corp of Engineers due to the ephemeral-nature of each; however, an Approved Jurisdictional Determination will need to be sought from the agency to document this conclusion. No impacts to the Santa Clara River are proposed.

Table 3.2-4. Summary of Potential Jurisdictional Waters Within the Study Area

Jurisdiction	Study Area (acres)
RWQCB/CDFW	
Features	
Non-Wetland Waters	3.34
Swales	0.27
Erosional Features	0.05
Total	**3.80**

Notes: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.

3.2.1.9 Sensitive and Special-Status Plant Species

The 80 plant species that are considered endangered, rare, or threatened under CEQA Guidelines Section 15380 and that are known to occur within the 14 USGS 7.5-minute topographic quadrangles that the Study Area is in and the quadrangles that the 10-mile buffer intersects, as well as the species provided by the query of the USFWS' Information for Planning and Consultation, are provided in Appendix 3.2B (CDFW 2025a; CNPS 2025a; USFWS 2025d). This appendix provides evaluations for each of the special-status species' occurrence in the Study Area vicinity and their potential to occur based on known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. Special-status plant species that have low potential or are not expected to occur are not further analyzed in this document because no direct, indirect, or cumulative impacts are expected based on the negative surveys and evaluation that these species do not have a moderate or high potential to occur onsite.

Of the 80 special-status plant species, the following 11 species were initially determined to have a moderate or high potential to occur due to suitable habitat being present and having recent records in the vicinity or region: California androsace (*Androsace elongata* ssp. *acuta*), club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*), slender mariposa-lily (*Calochortus clavatus* var. *gracilis*), Plummer's mariposa-lily (*Calochortus plummerae*), Peirson's morning-glory (*Calystegia peirsonii*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), green monardella (*Monardella viridis*), California spineflower (*Mucronea californica*), Robbins' nemacladus (*Nemacladus secundiflorus* var. *robbinsii*), and Lemmon's syntrichopappus (*Syntrichopappus lemmonii*). None of these species are listed under FESA or CESA.

Special-status plant surveys were conducted in 2023 to determine the presence or absence of plant species that had a moderate or high potential to occur in the Study Area. Two (2) sensitive plant species, short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) and golden linanthus (*Leptosiphon aureus*), were mapped during the focused special-status plant surveys in 2023 within the proposed gen-tie route portion of the Study Area, as shown in Figure 3.2-10, Sensitive or Special-Status Species Survey Results. CNDDB forms for the occurrences are found in Appendix 3.2J, CNDDB Forms. The remaining nine (9) species were then reduced to a low potential to occur and will not be analyzed further. Sensitive plant species potential to occur within 1,000 feet of the gen-tie route options are

expected to be similar to the Study Area because there are no significant changes in topography, geology, or hydrology within that distance.

Two additional special-status plant species, Douglas' fiddleneck (*Amsinckia douglasiana*) and Raven's blazing-star (*Mentzelia ravenii*), were recorded on one day of the special-status plant surveys but were not mapped. Instances of Douglas' fiddleneck did not occur in database queries and was not a focal species based upon the initial habitat assessment for special-status. At the time rare plant surveys were conducted, Raven's blazing-star did not have a CRPR rank. Raven's blazing star received a rank in March 2025 (CNPS 2025a). Finally, two Southern California black walnut, which is a CRPR 4.2 species, were mapped within a residential property but are assumed to have been planted since the habitat in the Study Area is atypical for the species. As such, it will not be analyzed as a special-status species but are included in the protected tree analysis.

Short-Joint Beavertail

Short-joint beavertail has a CRPR ~~California Rare Plant Ranks (CRPR)~~ of 1B.2, which is defined as plants rare, threatened, or endangered in California and elsewhere, with 20-80% of occurrences threatened (CNPS 2025a). The species is a cactus that can be found in creosote bush scrub, chaparral, pinyon-juniper woodland, and Joshua tree woodland (CDFW 2025a). Short-joint beavertail was mapped within the proposed gen-tie alignment portion of the Study Area, as shown in Figure 3.2-10, Sensitive or Special-Status Species Survey Results.

Golden Linanthus

Golden linanthus has a CRPR of 4.2, which is defined as a plant with limited distribution and is moderately threatened in California (CNPS 2025a). The species can be found in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland (CDFW 2025a). The species was mapped within the proposed gen-tie alignment portion of the Study Area, as shown in Figure 3.2-10, Sensitive or Special-Status Species Survey Results.

Douglas' Fiddleneck

Douglas' fiddleneck has a CRPR of 4.2, which is defined as a plant with limited distribution and is moderately threatened in California (CNPS 2025a). The species can be found in cismontane woodland and valley and foothill grassland (CDFW 2025a). The species was inadvertently not mapped, but it is assumed to have occurred in juniper woodland.

Raven's Blazing-Star

Raven's blazing-star has a CRPR of 1B.3, which is defined as plants rare, threatened, or endangered in California and elsewhere, with less than 20% of occurrences threatened (CNPS 2025a). The species can be found in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. The species was not mapped because it did not have a CRPR at the time of the survey. Raven's blazing-star received a CRPR rank in March 2025 (CNPS 2025a), so it was not considered a special-status plant at the time of the surveys.

3.2.1.10 Sensitive and Special-Status Wildlife Species

The ~~61~~ 62 wildlife species that are considered endangered, rare, or threatened under CEQA Guidelines Section 15380 and that are known to occur within the 14 USGS 7.5-minute topographic quadrangles that the Study Area is in and the quadrangles that the 10-mile buffer intersects, as well as the species provided by the query of the

USFWS' Information for Planning and Consultation and Los Angeles County's Sensitive Bird Species, are provided in Appendix 3.2B (CDFW 2025a; CNPS 2025a; USFWS 2025d; Los Angeles Audubon 2009). This appendix provides evaluations for each of the special-status species' occurrence in the Study Area vicinity and their potential to occur based on known range and habitat associations. Special-status wildlife species that have low potential or are not expected to occur are not further analyzed in this document because no direct, indirect, or cumulative impacts are expected based on the negative surveys and evaluation that these species do not have a moderate or high potential to occur on site. This includes three species that are included in Los Angeles County's Sensitive Bird Species (Los Angeles Audubon 2009): Scott's oriole (*Icterus parisorum*), vesper sparrow (*Pooecetes gramineus*), and western meadowlark (*Sturnella neglecta*). These three species were not observed during site surveys and have a low potential to occur in the Study Area and are not discussed further.

Two (2) special-status species were observed foraging in the BESS portion of the Study Area, loggerhead shrike (*Lanius ludovicianus*) and greater roadrunner (*Geococcyx californianus*). One species, mountain lion (*Puma concolor*), has a high potential to occur as a transient. The following six (6) special-status species had moderate to high potential to occur in the Study Area: Crotch's bumble bee, California legless lizard (*Anniella* spp.), Blainville's horned lizard (*Phrynosoma blainvillii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Artemisiospiza belli belli*), and mountain lion. The 52 special-status species with a low potential to occur (six [6] species) or species that are not expected to occur (46 species) are excluded from further discussion below, except for western burrowing owl (*Athene cunicularia hypugaea*) and American badger (*Taxidea taxus*). A discussion of western burrowing owl is provided below; however, since burrowing owl is not expected in the Study Area it is not further analyzed apart from the discussion in this section. Sensitive wildlife species potential to occur within 1,000 feet of the gen-tie route options are expected to be similar to the Study Area because there are no significant changes in topography, geology, or hydrology within that distance.

Crotch's Bumble Bee

Crotch's bumble bee is a candidate for listing as "Endangered" under CESA and is afforded the protection of CESA while the California Fish and Game Commission decides if listing the species is warranted. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (The Xerces Society 2018). In California, the species inhabits open grassland and scrub habitats (The Xerces Society 2018). The size of Crotch's bumble bee colonies has not been well documented, but like most other species of bumble bees, the species primarily nests underground (The Xerces Society 2018). Bumble bees, including Crotch's bumble bee, are generalist foragers and have been reported visiting a wide variety of flowering plants. Since it has a very short tongue, Crotch's bumble bee is best suited to forage at open flowers with short corollas (The Xerces Society 2018). The plant families most associated with observations or collections of the species from California include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (The Xerces Society 2018). Nectar plants known to be visited by Crotch's bumble bee include the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* (Williams et al. 2014, Xerces Society et al. 2018), but it is assumed flowering plants in other genera could also support foraging by this species.

Crotch's bumble bee could use small mammal burrows within all the vegetation communities in the Study Area and forage on suitable plant species within those communities. However, no Crotch's bumble bee were observed during the surveys that occurred over two survey seasons. No bumble bees of any kind were observed during that period. Floral resources for the species are present but in limited numbers, with the Study Area being dominated by California juniper woodland, fourwing saltbush scrub, and Mormon tea scrub, as shown in Table 3.2-3, Vegetation Communities and Land Covers in the Study Area. Additionally, there are few records for the occurrence of the species or any other bumble bee from the Acton region (CDFW 2025a; iNaturalist 2025; The Xerces Society 2025).

Due to the limited foraging opportunities and the few records of bumble bees as a whole in the region, the Project is not expected to involve take of Crotch's bumble bee.

California Legless Lizard

This description provides information for three (3) potential species of legless lizard that may be found in the Study Area: Northern California legless lizard (*Anniella pulchra*), Southern California legless lizard (*Anniella stebbinsi*), and California legless lizard (*Anniella* spp.). This is due to the current uncertainty of the taxonomy of the genus in the Study Area's region (Nafis 2025). All three are considered CDFW SSC. These species are most commonly found in coastal dunes and coastal scrub, but also oak woodland, Joshua tree woodland, and pinyon-juniper woodland (Hansen and Shedd 2025), and are generally found in moist, loose soil (CDFW 2025a). California legless lizard has moderate potential to occur in the Study Area beneath the larger California junipers due to the expected higher moisture content of the soil.

Blainville's Horned Lizard

Blainville's horned lizard is a CDFW SSC that occurs throughout most of California in locations west of the desert and Cascade-Sierran highlands, in elevations from sea level to around 2,438 meters (8,000 feet) AMSL (Hansen and Shedd 2025). Despite a wide-ranging distribution, the species seems to be restricted to localized populations because of its association with loose soils that have a high sand content (Jennings and Hayes 1994). The species is found in a wide variety of vegetation types with the requisite loose sandy soils, including California sagebrush scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest (Klauber 1939; Stebbins 1954). Up to 90% of the diet of Blainville's horned lizard consists of native harvester ants (*Pogonomyrmex* spp.) (Pianka and Parker 1975), and the species does not appear to eat non-native Argentine ants (*Linepithema humile*) (Jennings and Hayes 1994). The species has a moderate potential to occur in a variety of the vegetation communities in the Study Area.

Greater Roadrunner

Observations of greater roadrunner were made in the Study Area but were not mapped since the species is highly mobile and expected to occur throughout the area. The species habitats include areas dominated by creosote, mesquite, chaparral, and tamarisk, as well as grasslands, riparian woodlands, and canyons (Cornell Lab 2025). Greater roadrunner nest sites are 3 to 10 feet or more off the ground, on a horizontal branch or in the crotch of a sturdy bush, cactus, or small tree (Cornell Lab 2025). Greater roadrunner is considered sensitive by the County (Los Angeles Audubon 2009). The species could use the California juniper in the Study Area for nesting and could forage throughout the Study Area.

Loggerhead Shrike

A single observation of loggerhead shrike was made in the Study Area, as shown in Figure 3.2-10, Sensitive or Special-Status Species Survey Results. The species is a CDFW SSC that occurs throughout the United States, Mexico, and portions of Canada and is widespread at the lower elevations in California (Humple 2008). Preferred habitats for the species are open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or man-made structures (such as the top of chain-link fences or barbed wire) that provide a location to impale prey items for storage or manipulation (Humple 2008). Nest sites are chosen based more on the cover than the particular vegetation species and are usually constructed in a dense shrub or tree well below the crown and are well concealed

(Yosef 1996). The species could use the California juniper in the Study Area for nesting and could forage throughout the Study Area.

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow is on the CDFW Watch List and occurs in sparse, mixed chaparral and coastal scrub habitats (CDFW 2025a). The species frequents relatively steep, often rocky hillsides with grass and forb patches and also grassy slopes without shrubs, if rock outcrops are present (CDFW 2025a). The species has a moderate potential to occur on the slopes of the gen-tie portion of the Study Area.

Bell's Sage Sparrow

Bell's sage sparrow is on the CDFW Watch List and occupies semi-open habitats with evenly spaced shrubs that are 1 meters to 2 meters (3.3 feet to 6.6 feet) high (County of Riverside 2008). CDFW still recognizes *A. belli belli* but the subspecies has been reclassified as its own species Bell's sparrow (*A. belli*), with the other subspecies *A. belli nevadensis* reclassified as sagebrush sparrow (*A. nevadensis*). For site selection, specific shrub species may be less important than overall vertical structure, habitat patchiness, and vegetation density (Wiens and Rotenberry 1981). At higher elevations in Southern California, Bell's sage sparrow often occurs in big sagebrush (County of Riverside 2008). Sage sparrows seek cover in fairly dense stands in chaparral and scrub habitats during the breeding season. Bell's sage sparrow has a moderate potential to occur in the *Artemisia tridentata* dominant and codominant vegetation communities in the Study Area.

Mountain Lion

Mountain lions associated with Southern California and Central Coast populations are designated as a State candidate endangered species. On April 16, 2020, the California Fish and Game Commission voted to designate the Southern California and Central Coast mountain lions as a candidate for listing as an endangered species under the CESA. The vote triggered a 1-year review by CDFW to determine whether these mountain lion populations should be formally protected under CESA; however, the listing status of this species is still currently unresolved at the time of this report.

The California mountain lion occurs throughout much of California open space, occurring in or moving through nearly all but the most urbanized settings. This species inhabits a wide range of habitat types where prey items such as mule deer (*Odocoileus hemionus*) and bighorn sheep (*Ovis canadensis*) are present, from interior, arid rocky scrublands, to upper montane coniferous forest, to chaparral, coastal scrub, and woodland habits along the coastal plain.

According to the Mountain Lion Predicted Habitat dataset (CDFW 2025b), the proposed BESS portion of the Study Area consists primarily of high quality habitat and most of the proposed gen-tie route is within low quality habitat. However, CDFW's Mountain Lion Habitat Suitability dataset has most of the proposed BESS portion of the Study Area and gen-tie alignment as low suitable habitat (Dellinger et al. 2020; CDFW 2025b). As such, the species could occur throughout most of the Project area during home range movement, dispersal, and foraging. The potential to occur is based on habitat suitability: scrub vegetation, presence of mule deer, and proximity to high-quality habitat on large swaths of public lands to the east in the Angeles Nation Forest. However, females keep their young in dens located in rocky terrain or in dense vegetation that provide cover but avoid roads and stay at a distance from human disturbance four times greater (approximately 600 meters) than non-reproductive mountain lions (Center for Biological Diversity and the Mountain Lion Foundation 2019). The Study Area is located adjacent to residential

neighborhoods, Sierra Highway, the Southern Pacific Railroad lines, Carson Mesa Road, and SR-14, all of which have associated human presence. As such, females of the species are not expected to establish natal dens in the Study Area.

Western Burrowing Owl

As of October 15, 2024, western burrowing owl (*Athene cunicularia hypugaea*) is being considered for listing under the California Endangered Species Act (CESA) and the species is provided with the protection of CESA. Primary habitat requisites for burrowing owl are the presence of burrows for roosting and nesting and vegetation structure that is relatively short and sparse (Center for Biological Diversity et al. 2024). The species was historically abundant throughout Southwestern California, including up to the 610-meter (2,001.31 feet) elevation contour in the Transverse Range, but have been extirpated from Ventura, western Los Angeles, and Orange counties and are near extirpation in San Diego County (Center for Biological Diversity et al. 2024). The petition to list the species does not include the Study Area in the breeding range of the species and does not include the Study Area in one (1) of the 16 burrowing owl regions in California (Center for Biological Diversity et al. 2024).

CDFW's range and predicted habitat for burrowing owl does not include the Study Area (CDFW 2025f). There are five (5) CNDDB records of the species within 10 miles that are in the Antelope Valley to the north of the Study Area, with the most recent being 2006 (CDFW 2025a). Citizen science-based databases have only five (5) records within 10 miles that are in the Antelope Valley to the north of the Study Area (eBird 2025; iNaturalist 2025).

The Study Area is dominated by shrub-dominant vegetation communities that have relatively high density. The Study Area elevation ranges from 2,700 feet to 3,500 feet above mean sea level, which is above the known historic occurrences of the species in the Transverse Ranges. California ground squirrel burrows are present but are sparse and none of the extensive surveys of the Study Area have identified burrowing owl or diagnostic sign (i.e., pellets, feathers, and extensive whitewash). Based upon the lack of suitable habitat; the Study Area being above the known elevation occurrence of the species in the region; the lack of observations of the species during extensive surveys; and the limited number of records of the species within 10 miles, burrowing owl is not expected in the Study Area and will not be further analyzed.

American Badger

American badger is a CDFW Species of Special Concern that is an uncommon, permanent resident found throughout most of the state, except in the northern North Coast (CDFW 2025f). Suitable habitat for the species is characterized by herbaceous, shrub, and open stages of most habitats with dry, friable soils (CDFW 2025f). American badger dig burrows in friable soil for dens and frequently reuse old burrows; although, some may dig a new den each night, especially in summer (CDFW 2025f). American badger is a highly specialized burrowing mammal that primarily eats burrowing rats, mice, chipmunks, and especially ground squirrels and pocket gophers (CDFW 2025f).

There is one (1) CNDDB record of American badger within 20 miles of the Study Area from 1930 at Lake Los Angeles (CDFW 2025a). There is one (1) 2021 iNaturalist record of the species approximately 8.6 miles to the west near Agua Dulce (iNaturalist 2025). American badger has been determined to have a low potential to occur in the Study Area due to the presence of suitable habitat, but no individuals were observed and no diagnostic sign (i.e., burrows or digs with the species' conspicuous claw marks) were observed during the extensive surveys of the Study Area. As such, the species will not be further analyzed.

3.2.1.11 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703 et seq.), as amended (MBTA), prohibits the intentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

3.2.1.12 Bald and Golden Eagle Act

Golden eagle is protected by the federal The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) and are a fully protected species in California (Fish and Game Code 3511). The species is an uncommon permanent resident and migrant throughout California, except the center of the Central Valley (CDFW 2025f). Golden eagle nest on cliffs of all heights and in large trees in open areas, with rugged, open habitats with canyons and escarpments used most frequently (CDFW 2025f). The species needs open terrain for hunting, including grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats (CDFW 2025f). Golden eagle eats mostly rabbits and rodents, but it also takes other mammals, birds, reptiles, and some carrion (CDFW 2025f).

There is one (1) CNDDB record of golden eagle nesting within 25 miles of the Study Area (CDFW 2025a). The record dates are from 1963, 1964, and 1965, and document the collection of eggs from the species for each of those years. The record location has a 1-mile accuracy and the location description was "Acton, in Aliso Canyon, off Soledad Canyon, in Angeles National Forest," which CDFW interpreted as being closer to the mouth of Aliso Canyon (CDFW 2025a). The center of the 1-mile circle is approximately 2 miles to the south-southwest of the Study Area in an area that is devoid of cliffs or open areas with large trees (Google Earth 2025).

No eagle or other raptor nests were identified within the Study Area and 500-foot buffer during the focused raptor nest surveys conducted in 2025. The Study Area and surrounding area do not contain the elements (i.e., cliffs or large trees in open areas) associated with nesting by golden eagle, so nesting by the species is not expected. Additionally, the species would not be expected to nest in areas where a variety of human activity occur since the adults of the species have been documented to flush from nest when those activities happen within 1,000 meters of the nest (Spaul and Heath 2017). The activities within the residential neighborhoods surrounding the Study Area and the Vincent Substation are expected to deter golden eagle from nesting within sight of these areas. Potential nesting in the Angeles National Forest to the east of the site are not expected to be visible from the Study Area and activities during construction would not affect any potential nesting. The species could forage or migrate through the Study Area but the Project transmission facilities will be designed consistent with the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (Avian Power Line Interaction Committee [APLIC] 2006) where feasible. Transmission facilities will also be evaluated for potential collision reduction devices in accordance with *Reducing Avian Collisions with Power Lines: The State of Art in 2012* (APLIC 2012).

3.2.1.13 Wildlife Corridors and Habitat Linkages

Wildlife movement corridors have been recognized by federal and state agencies as important habitats worthy of conservation. Wildlife corridors provide migration channels seasonally (i.e., between winter and summer habitats), and provide non-migrant wildlife with the opportunity to move within their home range for food, cover, reproduction,

and refuge. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The Study Area does not overlap with any South Coast Missing Linkages, California Essential Habitat Connectivity Areas or Natural Landscape Block or Natural Landscape Block (South Coast Wildlands 2008, CDFW 2014, 2017). Given that the existing vegetation is surrounded on three (3) sides by similar habitats, the Study Area likely provides habitat for local wildlife movement but is not recognized as an important regional wildlife corridor by any state agency or jurisdiction and is of limited linkage value on a landscape scale. Furthermore, although local wildlife may utilize the Study Area for movement, regional connectivity is highly limited by residential neighborhoods, Sierra Highway, the Southern Pacific Railroad lines, Carson Mesa Road, and SR-14 to the west. Thus, the Project is not expected to impose significant barriers to wildlife movement.

3.2.1.13.1 California Desert Native Plant Act Covered Species

Four (4) species covered by the California Desert Native Plants Act were mapped within the Project footprint and a 150-foot buffer: chaparral yucca, Wiggins' cholla, beavertail pricklypear (*Opuntia basilaris* var. *basilaris*) and short-joint beavertail. Table 3.2-5, California Desert Native Plant Act Covered Species in the Survey Area, summarizes the numbers within each area and Figure 3.2-11, California Desert Native Plant Act Covered Species in the Survey Area, shows the locations of these species.

Table 3.2-5. California Desert Native Plant Act Covered Species in the Survey Area

Species	Amount
chaparral yucca	1,118
Wiggins' cholla	644
beavertail pricklypear	94
short-joint beavertail	4
Total	1,860

3.2.1.14 Los Angeles County Significant Ecological Area – Protected Trees

A total of 1,215 trees were documented within the Survey Area. Of these, 1,191~~34~~ trees are located within the Santa Clara River SEA, and 1,078~~21~~ of those are classified as protected California junipers as shown in Figure 3.2-12, Protected Trees, and summarized in Table 3.2-6, Summary of Trees Within the SEA Portion of the Study Area. The species is a shrub that is native to California and found only slightly beyond California borders (Calflora 2025). California juniper typically has several trunks and grows up to 13 feet (Jepson Flora Project 2025). Apart from the 1,078 California juniper, nine (9) other protected trees were identified (velvet ash, Southern California black walnut, California sycamore (*Platanus racemosa*), and Fremont cottonwood (*Populus fremontii*); however, no impacts would occur to California sycamore or Fremont cottonwood. Two of the trees, velvet ash and Southern California black walnut, were found within the SEA portion of the Study Area as ornamental trees associated with a residence. These species do not typically occur in the habitats in the Study Area. The protected trees include ~~953~~ 1,005 standard protected trees and ~~68~~ 73 heritage trees. The remaining 194 trees consist of 81 located outside the SEA and 113 trees within the SEA that are classified as dead. Appendix A, Tree Location, of Appendix A, Protected Tree Report, of Appendix 3.2G, Biota Report, provides detailed locations of all individual trees assessed for the proposed Project

and full results of the survey. Because the BESS facility site is located entirely outside of the Santa Clara SEA boundaries, the SEA ordinance and SEA program do not apply to that portion of the Project. Thus, there are no protected trees on the BESS facility site. As depicted in Figure 3.2-12, there are some protected and heritage trees located along the two gen-tie line routes.

Table 3.2-6. Summary of Trees Within the SEA Portion of the Study Area

Scientific Name	Common Name	Total Number of Protected Trees	Number of Heritage Trees	Total Number of Non-Protected Trees	Total Number of Trees
Juniperus californica	California juniper	~~953~~ 1,069	~~68~~ 73	113	~~1,134~~ 1,182
Fraxinus velutina	velvet ash	1	0	0	1
Juglans californica	Southern California black walnut	2	0	0	2
Platanus racemosa	California sycamore	1	0	0	1
Populus fremontii	Fremont cottonwood	5	0	0	5
	Total	~~953~~ 1,078	~~68~~ 73	113	~~1,134~~ 1,191

3.2.2 Environmental Analysis

Potential direct. indirect and cumulative impacts to biological resources were evaluated to determine the potential permanent and temporary effects of construction and operation of the proposed Project. Results from the field surveys, habitat evaluations and literature review were evaluated to address the potential for presence of sensitive biological resources within the Study Area were presented in the prior section.

Section 3.2.2, contained herein, identifies the biological resources that may be affected directly or indirectly and may have temporary or permanent impacts. These impact categories are defined as follows:

Direct. The CEQA defines direct impacts as those that result from the project and occur at the same time and place. Project related activities, such as alteration, disturbance or destruction of biological resources are considered a direct impact. Direct impacts for this Project are those associated with the grading and development of the BESS facility site and both gen-tie routes.

Indirect. CEQA defines indirect impacts as impacts that are caused by the project but do not occur at the same time but rather at different but a reasonably foreseeable future time. Indirect impacts associated with the proposed Project include effects to biological or aquatic resources as a result of dust, noise, vibration, or potential erosion.

Permanent. All impacts that result in the irreversible removal of biological resources are considered permanent. Permanent impacts for the proposed Project include the conversion of land for the BESS facility site and associated access facilities.

Temporary. Temporary impacts are considered to have reversible effects on biological resources. Temporary impacts associated with the proposed Project include tension/pulling sites along the gen-tie right of way, and other work associated with temporary access along the gen-tie line.

3.2.2.1 Significance Criteria

Factors typically used to evaluate the significance of project-related impacts are set forth in Appendix G of the CEQA Guidelines. CEQA Guidelines Appendix G is a screening tool, not a method for setting thresholds of significance. Appendix G is typically used in the Initial Study phase of the CEQA process, asking a series of questions. The purpose of these questions is to determine whether a project requires an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration.

As the Governor's Office of Planning and Research stated, "Appendix G of the Guidelines lists a variety of potentially significant effects but does not provide a means of judging whether they are indeed significant in a given set of circumstances." The answers to the CEQA Guidelines Appendix G questions are not determinative of whether an impact is significant or less than significant. Nevertheless, the questions presented in CEQA Guidelines Appendix G are instructive. Potentially significant biological impacts resulting from the Project were assessed by the following criteria:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered, threatened, candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- 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 CDFW or USFWS.
- Have a substantial adverse effect on federal or state protected WOTUS [waters of the United States] (including wetlands) as defined by Sections 404 and 401 of the 1972 Amendments to the Federal Water Pollution Control Act, commonly known as the Clean Water Act, or the Porter-Cologne Act, either through direct removal, filling, hydrological interruptions, 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 native wildlife corridors or impede the use of 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, NCCP [natural community conservation plan], or other approved local, regional, or state habitat conservation plan.

CEQA Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if the species is not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future.

3.2.2.2 CEQA Appendix G Assessment Criteria

The following impact analysis includes both gen-tie options, so the potential direct permanent and temporary impact acreages presented are in the comprehensive analyses of both gen-tie routes are greater than the expected actual impact acreages associated with constructing only one (1) gen-tie.

3.2.2.2.1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as

endangered, threatened, candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by CDFW or USFWS?

Direct Impacts

Permanent and temporary direct impacts to special-status plants and wildlife could occur from construction of the proposed Project.

Special-status Plants

Less than Significant with Mitigation. Two special-status plant species, Douglas' fiddleneck and Raven's blazing-star, were recorded on one day of the special-status plant surveys but were not mapped. As such the two species could be directly impacted during vegetation removal and grading activities if present. The loss of individuals during construction could be significant based upon the abundance of each being impacted and would require mitigation. **MM-BIO-1**, Special-Status Plant Species Surveys and seed collection, requires pre-construction surveys for the species to determine if the species are present and the collection of seeds should the species be present. ~~Two (2) special-status plant species, short-joint beavertail and golden linanthus, were mapped in the gen-tie route portion of the Study Area during surveys in 2023. None of the mapped individuals will be directly impacted by the Project. However, some of the individuals of both species are in close proximity to the Project construction limits.~~ **MM-BIO-~~1~~2**, Demarcation of Disturbance Limits, requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. **MM-BIO-~~2~~3**, Biological Monitoring, requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the flagged limits are adhered to during construction. **MM-BIO-~~3~~4**, Worker Education Awareness Program, requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and Study Area, and measures to avoid and minimize impacts to those resources.

MM-BIO-5, On-Site Preservation, would require the establishment of a conservation area that will preserve up to approximately 136 acres of native vegetation communities (the non-impacted acres of the parcels associated with the gen-tie route) within the Study Area parcels associated with the gen-tie routes, as shown in Figure 3.2-13, Conservation Area, which will preserve habitat for the species should an ITP for the species be needed. The proposed mitigation parcels are located in the SEA and are made up of the same habitat as the land where the potential impacts would occur and thus make them ideal parcels for mitigation. The proposed mitigation land is made up of the parcels and gross acreages found in Table 3.2-7, Potential Parcels to be Used for On-Site Preservation, and shown on Figure 3.2-13, Conservation Area.

Table 3.2-7. Potential Parcels to be Used for On-Site Preservation

APN	Gross Acreage
3056-019-040 (south of railroad tracks)	12.85
3056-017-022	9.25
3056-017-016	5.07
3056-027-007	40.31
3056-015-008	40.06
3056-017-028	9.93
3056-017-027	9.90
3056-017-026	9.39

Table 3.2-7. Potential Parcels to be Used for On-Site Preservation

APN	Gross Acreage
3056-017-023	40.04
Total Gross Acreage	173.36[1]

Notes: APN = Assessor's Parcel Number.
[1] Excludes areas where permanent impacts would occur. There will be up to approximately 3.44 acres of permanent impacts. The gross acreage of the parcels above totals 176.80 acres. Therefore, the total gross acreage when excluding the 3.44 acres of permanent impact is approximately 173.36 acres.

Redacted Preliminary ALTA Surveys have been provided in Appendix 3.2A. The ALTA survey information has been redacted to remove landowner names, non-mitigation land information, and any financial information that may be present in the title reports associated with the ALTA surveys. The parcels being considered for mitigation land are not already conserved, nor do they contain any conflicting easements or encumbrances that would preclude the use of this land for habitat mitigation, such as severed mineral rights, Williamson Act contracts, or subdivision prohibitions. Please note that the title report in the Redacted Preliminary ALTA Survey for APN 3056-015-023 includes exception 3 for an oil and gas lease on the APN. That exception has been removed from the title and is no longer applicable to the parcel. Please see the updated title report for APN 3056-15-023 included at the end of the Redacted Preliminary ALTA Survey document.

Phase I Environmental Site Assessment information for the mitigation lands is provided in Appendix 3.5A, Hazardous Materials Handling Appendices Part 1, and no current or historical recognized environmental conditions were found.

MM-BIO-6, Habitat Mitigation and Monitoring Plan, would require the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include using the seeds from any special-status plants that would be impacted and include floral resources that special-status wildlife could use in the conservation area.

Project implementation of MM-BIO-1 through MM-BIO-~~5~~3 will reduce potential impacts to less than significant. Impacts will be **less than significant with mitigation**.

Two (2) additional special-status plant species, short-joint beavertail and golden linanthus, were mapped in the gen-tie route portion of the Study Area during surveys in 2023. None of the mapped individuals will be directly impacted by the Project. However, some of the individuals of both species are in close proximity to the Project construction limits. MM-BIO-2 requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the integrity of any buffers established for active nests. MM-BIO-4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources. Project implementation of MM-BIO-1 through MM-BIO-5 will reduce potential impacts to less than significant. Impacts will be **less than significant with mitigation**.

Special-status Wildlife

Less than Significant with Mitigation. Six (6) special-status wildlife species have a moderate or high potential to occur: Crotch's bumble bee, California legless lizard, Blainville's horned lizard, Southern California rufous-crowned

sparrow, Bell's sage sparrow, and mountain lion. One (1) special-status wildlife species (loggerhead shrike) has been observed in the Study Area.

Crotch's Bumble Bee

Protocol surveys for Crotch's bumble bee conducted in 2024 and 2025 were negative for the species. During the initial survey each year, it was noted that there were very limited foraging opportunities within the Study Area. However, bumble bees are opportunistic and highly mobile. The species typically nests underground, so nesting individuals could be highly vulnerable to injury and mortality during construction, which could crush nests and individuals, if present on site. Harm to or the loss of individuals during construction will be significant due to reducing the rare species' numbers and will require mitigation. If Crotch's bumble bee is still a candidate for listing under CESA or has been listed under CESA at the time of the start of construction of the Project, the following mitigation measures would be implemented. If the species is determined to not warrant listing under CESA at the time of the start of construction of the Project, then no mitigation is necessary. MM-BIO-47, Crotch's Bumble Bee Minimization Measures, would require pre-construction surveys for Crotch's bumble bee nests, with buffers established around active nests until the nests are deemed inactive.

~~MM-BIO-5, On-Site Preservation, would require the establishment of a conservation area that will preserve up to approximately 136 acres of native vegetation communities (the non-impacted acres of the parcels associated with the gen-tie route) within the Study Area parcels associated with the gen-tie routes, as shown in Figure 3.2-13, Conservation Area, which will preserve habitat for the species should an ITP for the species be needed. The proposed mitigation parcels are located in the SEA and are made up of the same habitat as the land where the potential impacts would occur and thus make them ideal parcels for mitigation. The proposed mitigation land is made up of the parcels and gross acreages found in Table 3.2-7, Potential Parcels to be Used for On-Site Preservation, and shown on Figure 3.2-13, Conservation Area.~~

~~Table 3.2-7. Potential Parcels to be Used for On-Site Preservation~~

~~APN~~	~~Gross Acreage~~
~~3056-019-040 (south of railroad tracks)~~	~~12.85~~
~~3056-017-022~~	~~9.25~~
~~3056-017-016~~	~~5.07~~
~~3056-027-007~~	~~40.31~~
~~3056-015-008~~	~~40.06~~
~~3056-017-028~~	~~9.93~~
~~3056-017-027~~	~~9.90~~
~~3056-017-026~~	~~9.39~~
~~3056-017-023~~	~~40.04~~
~~Total Gross Acreage~~	~~173.36[1]~~

~~Notes: APN = Assessor's Parcel Number.~~

~~[1] Excludes areas where permanent impacts would occur. There will be up to approximately 3.44 acres of permanent impacts. The gross acreage of the parcels above totals 176.80 acres. Therefore, the total gross acreage when excluding the 3.44 acres of permanent impact is approximately 173.36 acres.~~

~~Redacted Preliminary ALTA Surveys have been provided in Appendix 3.2A. The ALTA survey information has been redacted to remove landowner names, non-mitigation land information, and any financial information that may be present in the title reports associated with the ALTA surveys. The parcels being considered for mitigation land are~~

~~not already conserved, nor do they contain any conflicting easements or encumbrances that would preclude the use of this land for habitat mitigation, such as severed mineral rights, Williamson Act contracts, or subdivision prohibitions. Please note that title report in the Redacted Preliminary ALTA Survey for APN 3056-015-023 includes exception 3 for an oil and gas lease on the APN. That exception has been removed from the title and is no longer applicable to the parcel. Please see the updated title report for APN 3056-15-023 included at the end of the Redacted Preliminary ALTA Survey document.~~

~~Phase I Environmental Site Assessment information for the mitigation lands is provided in Appendix 3.5A, Hazardous Materials Handling Appendices Part 1, and no current or historical recognized environmental conditions were found.~~

~~**MM-BIO-6**, Habitat Mitigation and Monitoring Plan, would require the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include flora resources that the species could use in the conservation area.~~ MM-BIO-~~1~~ 2 requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-~~2~~ 3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the integrity of any buffers established for active nests. MM-BIO-~~3~~ 4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources. MM-BIO-4 requires the establishment of a conservation area that will preserve suitable habitat for the species (considered to be all of the native vegetation communities for Blainville's horned lizard and the communities with California juniper present for California legless lizard) and where captured individuals would be relocated. MM-BIO-5 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas that the species could use in the conservation area. If Crotch's bumble bee is still a candidate for listing under CESA or has been listed under CESA at the time of the start of construction, the Project's implementation of MM-BIO-2 through MM-BIO-~~6~~ 7 will reduce potential direct impacts to **less than significant with mitigation**.

Special-Status Reptiles

Less than significant with mitigation. California legless lizard and Blainville's horned lizard are designated as CDFW Species of Special Concern. The loss of habitat for a special-status species is not considered as a substantial adverse effect, and therefore not considered a potentially significant impact, simply because there is an impact. That impact must also be shown to have a substantial adverse effect on the resource. In the case of an individual species, the effect of the habitat loss must be substantial and adverse relative to the range of the species (i.e., that the loss of habitat by a particular development activity will adversely affect the species as a whole, and not simply the effect that a development activity will have on a specific population). These species are vulnerable to mortality or injury during vegetation and ground disturbing activities associated with construction. It is highly unlikely that short-term construction activities could cause the greater population of these special-status species to drop below self-sustaining levels due to the relatively small area of construction activity and the short-term nature of the construction schedule. However, mortality or injury to individual species during the vegetation removal and grading portion of construction is a reasonable possibility, so direct permanent impacts are possible and would be significant. **MM-BIO-~~7~~8,** Special-Status Wildlife Relocation Plan, requires the preparation of a plan that has a process of clearance surveys and relocation of special-status wildlife into non-impacted portions of the Study Area. MM-BIO-~~2~~ 3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for relocating any special-status reptiles. MM-BIO-~~3~~ 4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources. MM-BIO-5 requires the establishment of a

conservation area that will preserve suitable habitat for the species (considered to be all of the native vegetation communities for Blainville's horned lizard and the communities with California juniper present for California legless lizard) and where captured individuals would be relocated. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas that the species could use in the conservation area. Project implementation of MM-BIO-~~2~~3. MM-BIO-~~3~~4, MM-BIO-5, MM-BIO-6, and MM-BIO-~~7~~8 will reduce potential direct impacts to **less than significant with mitigation**.

Special-Status Birds and Protected Nesting Bird Species

Less than significant with mitigation Three (3) special-status bird species, loggerhead shrike, Southern California rufous-crowned sparrow, and Bell's sage sparrow, have suitable nesting habitat on the Project site. Additionally, numerous other common species protected under the MBTA and California Fish and Game Code (Sections 3503, 3503.5, and 3513), including greater roadrunner, have suitable nesting habitat on site. Impacts to juvenile and adults of these species are not expected; however, nesting could be disrupted if construction occurs during the breeding season. Direct impacts to nesting birds could occur because of nest abandonment, reduced reproductive success, or other disruptions to nesting. Nests, eggs, and young could also be crushed or otherwise directly affected during vegetation clearing and grading. Impacts to special-status and protected nesting bird species could be potentially significant. **MM-BIO-~~8~~9**, Nesting Bird Avoidance, will provide pre-construction surveys and buffer establishment for active nests. MM-BIO-~~2~~3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the integrity of any buffers established for active nests. MM-BIO-~~3~~4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources. MM-BIO-5 requires the establishment of a conservation area that will preserve suitable habitat for the species (considered to be all of the native vegetation communities for loggerhead shrike, Southern California rufous-crowned sparrow, and Bell's sage sparrow). MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas that the species could use in the conservation area. Project implementation of MM-BIO-~~2~~3. MM-BIO-~~3~~4, MM-BIO-5, MM-BIO-6, and MM-BIO-~~8~~9 will reduce potential direct impacts to **less than significant with mitigation**.

Mountain Lion

Less than significant with mitigation Because California mountain lion is a candidate for state listing under CESA, Project impacts resulting in direct take of California mountain lion will require an ITP under CESA through coordination with CDFW; however, no natal dens have been detected during field efforts that have resulted in extensive cover of the Project site, and none are expected. Therefore, no direct take of California mountain lion is expected to occur because of the proposed Project.

Impacts will be **less than significant with mitigation**.

Indirect Impacts

Special-Status Plants

Less than Significant with Mitigation. Potential short-term or temporary indirect impacts to short-joint beavertail and golden linanthus located in the Study Area could result from construction activities and include impacts related to or resulting from the activities outside of the Project limits, generation of fugitive dust, increased human activity, and the introduction of pollutants from construction equipment. Excessive dust can decrease the vigor and

productivity of plants through effects on light, penetration, photosynthesis, respiration, and transpiration; increased penetration of phytotoxic gaseous pollutants; and increased incidence of pests and diseases. Additionally, invasive plant species could be introduced by the Project during construction and through landscaping installation that could alter the habitat and compete with special-status plants. These indirect impacts could result in additional loss of special-status plants that could be significant. Water trucks are expected as part of Project construction, which will reduce fugitive dust. **MM-BIO-~~9~~10**, Invasive Species Prevention Plan, requires the preparation and implementation of a plan that will avoid and minimize the introduction of non-native plant species that could compete for habitat space with plants that the species forages on by ensuring that vehicles and equipment used during construction are weed free. MM-BIO-~~2~~ 3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the Invasive Species Prevention Plan will be implemented. MM-BIO-~~3~~ 4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources, which will include a discussion on invasive plants. Project implementation of MM-BIO-~~2~~3, MM-BIO-~~3~~4, and MM-BIO-~~9~~ 10 will reduce potential indirect impacts to less than significant. Impacts will be **less than significant with mitigation**.

Special-Status Wildlife

Construction

Less than Significant with Mitigation. During construction activities, indirect impacts to sensitive wildlife could include construction-related dust, soil erosion, and water runoff decreasing or permanently altering habitat suitability. Without construction-related minimization measures to control dust, erosion, and runoff, and without compliance with National Pollutant Discharge Elimination System (NPDES) requirements, indirect impacts to riparian resources and upland communities could occur. However, standard construction BMPs to control dust, erosion, and runoff, including straw bales and silt fencing, will be implemented through the General Permit for stormwater control during construction to minimize these adverse effects. Additionally, implementation of MM-BIO-2 through MM-BIO-9 to reduce indirect impacts to special-status wildlife species will also contribute to the reduction of indirect impacts to **less than significant with mitigation**.

Operation

Less than Significant. Once constructed, the Project will be available to operate 7 days per week, 365 days per year. The facility will be remotely monitored and operated by an Owner contracted O&M provider as well as 16 on-site staff. Onsite maintenance will be required, which will include replacement of inverter power modules, filters, and miscellaneous electrical repairs on an as-needed basis. During operation of the Project substation, O&M staff will service the substation periodically for switching and other operation activities. Light duty maintenance trucks will be utilized to perform routine maintenance, including but not limited to equipment testing, monitoring, repair, routine procedures to ensure service continuity, and standard preventative maintenance. Typically, one major maintenance inspection will take place annually. The Project transmission facilities will be designed consistent with the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (Avian Power Line Interaction Committee [APLIC] 2006) where feasible. Transmission facilities will also be evaluated for potential collision reduction devices in accordance with *Reducing Avian Collisions with Power Lines: The State of Art in 2012* (APLIC 2012). Based upon the low volume of human activity and the proposed avian protecting Project design features, indirect impacts to wildlife during Project operation are expected to be **less than significant**.

The infrequent testing of the emergency backup generators onsite will introduce a new source of nitrogen deposition. The modeling showed that the highest nitrogen loading from such testing will be located just outside the northern boundary as shown in Appendix 3.2H. The nitrogen loading was estimated to 0.66. The potential for nitrogen deposition reduces significantly with distance from the source and the infrequent testing.

As previously discussed, the area consists primarily of vegetation communities that are classified as chaparral, coastal sage scrub, and North American desert woodland (juniper woodland) and the nitrogen loading from the project is below the critical load for those habitats, as shown in Table 3.2-8, Critical Nitrogen Loads for Biological Resources Within 6 Miles of the Project Site. As such, the nitrogen is well below any critical loads for other sensitive biological resources that are present or have the potential to occur, including short-joint beavertail, golden linanthus, Crotch's bumble bee, California legless lizard, Blainville's horned lizard, loggerhead shrike, Southern California rufous-crowned sparrow, Bell's sage sparrow, mountain lion, and jurisdictional waters. While there may be other biological species within 6 miles of the Study Area that are not listed here, the annual nitrogen deposition is well below the maximum impact area indicated above and will not be above other species' critical nitrogen loads.

Table 3.2-8. Critical Nitrogen Loads for Biological Resources Within 6 Miles of the Project Site

Biological Resource	Critical Nitrogen Loads (kg/ha/yr)
Chaparral	5-33
Coastal sage scrub	7.8-10
North American desert woodland	3-8.4

Source: Pardo et al 2011.
Note: kg/ha/yr = kilogram per hectare per year.

The quantity of nitrogen deposition from the Project emissions on vegetation will, in practice, be less than the model results because the assumptions modeled are inherently conservative (e.g., assuming the emergency backup generators are running at the same time). The nitrogen deposition will also be distributed incrementally throughout a year and not all nitrogen added to the soil during each deposition event will be available for plant use because of losses associated with soil processes. As a result, the testing of the Project's emergency backup generators will not lead to nitrogen deposition levels that exceed critical thresholds associated with significant impacts to natural vegetation communities and special status species in the vicinity of the Project site. Therefore, operations from the testing of the Project's emergency backup generators will result in less than significant impacts to natural vegetation communities and special status species within 6 miles of equipment operation.

Impacts will be **less than significant.**

3.2.2.2.2 Would the project 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 CDFW or USFWS.?

Direct Impacts

Less than Significant with Mitigation. As currently designed, the proposed Project will result in approximately 108.26 acres (approximately 33.23 acres temporary and approximately 75.03 acres permanent; includes both gen-tie line options) of direct impacts to vegetation communities and land covers through the removal of vegetation and grading of land to construct the proposed Project. Permanent impacts will occur due to the construction and operation of

the BESS portion of the Project and access roads and transmission pole pads associated with the gen-tie line. Temporary impacts will occur due to the construction of the two (2) underground fiber optic lines within the Southern Gen-Tie Route corridor, within areas proposed for construction laydown areas for the gen-tie work, within pull areas from stringing the gen-tie, and within other gen-tie work areas that are outside of the transmission pole pads and access roads. The total acreage for project-related impacts to the mapped vegetation communities located within the development area are provided in Table 3.2-9, Potential Impacts to Vegetation Communities and Land Covers in the Study Area.

Table 3.2-9. Potential Impacts to Vegetation Communities and Land Covers in the Study Area

Alliance	Association	CDFW Sensitive[1]	Ranking[2]	Potential Permanent Impacts - BESS[3] (Gross Acreages)	Potential Permanent Impacts – Gen-Tie[4] (Gross Acreage)[5]	Potential Temporary Impacts – Gen-Tie[6] (Gross Acreage)[5]
Native Communities						
Cheesebush – sweetbush scrub	*Ambrosia salsola – Larrea tridentata*	No	G4/S4	–	–	0.05
	Ambrosia salsola Association	No	G4/S4	–	–	1.57
Fiddleneck – phacelia fields	*Amsinckia menziesii – Erodium* spp.	No	G5/S5	2.08	–	–
California sagebrush – (purple sage) scrub	*Artemisia californica – Eriogonum fasciculatum*	No	G4/S4	–	0.08	1.44
Big sagebrush	*Artemisia tridentata – Ericameria nauseosa*	No	G5/S5	0.42	0.46	2.21
	Artemisia tridentata – Eriogonum fasciculatum	No	G5/S5	2.60	–	–
	Artemisia tridentata ssp. *parishii*	Yes	G2/S2	–	–	0.20
Fourwing saltbush scrub	*Atriplex canescens*	No	G5/S4	0.67	2.07	18.09
Mormon tea scrub	*Ephedra viridis*	No	G4/S4	17.84		–
Rubber rabbitbrush scrub	*Ericameria nauseosa – Juniperus californica*/herb	No	G5/S5	10.98	–	1.23
	Ericameria nauseosa	No	G5/S5	–	–	–
California buckwheat scrub	*Eriogonum fasciculatum*	No	G5/S5	4.75	–	–
	Eriogonum fasciculatum var. *foliolosum – Juniperus californica*	Yes	G3/S3	4.32	–	–
California buckwheat – Parish's goldeneye scrub	*Eriogonum fasciculatum* rock outcrop	Yes	Unranked	–	–	–

Table 3.2-9. Potential Impacts to Vegetation Communities and Land Covers in the Study Area

Alliance	Association	CDFW Sensitive[1]	Ranking[2]	Potential Permanent Impacts - BESS[3] (Gross Acreages)	Potential Permanent Impacts – Gen-Tie[4] (Gross Acreage)[5]	Potential Temporary Impacts – Gen-Tie[6] (Gross Acreage)[5]
California walnut groves	*Juglans californica / annual herbaceous*	Yes	G3/S3	–	–	–
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum – Eriogonum fasciculatum*	Yes	Unranked	10.68	0.53	0.35
	Juniperus californica / herbaceous	Yes	Unranked	7.16	0.39	1.16
	Juniperus californica / Eriogonum fasciculatum – Artemisia californica	No	G5/S5	–	–	–
			Subtotal:	*61.49*	*3.52*	*26.31*
Naturalized (Non-Native)						
Avena spp. – *Bromus* spp.	*Avena barbata – Bromus hordeaceus*	No	GNA/SNA	–	–	–
Bromus rubens – Schismus (*arabicus*, *barbatus*)	*Bromus rubens* – mixed herbs	No	GNA/SNA	–	–	–
			Subtotal:	–	–	–
Land Cover Types						
Disturbed habitat	Not applicable	No	NA/NA	6.00	0.36	3.34
Urban/Developed	Not applicable	No	NA/NA	3.25	0.41	3.58
			Subtotal:	*9.26*	*0.77*	*6.92*
			Total:	**70.74**	**4.29[5]**	**33.23[5]**

Notes: CDFW = California Department of Fish and Wildlife; BESS = battery energy storage system; gen-tie = generation interconnection.
Totals may not sum due to rounding and inclusion of both gen-tie routes.

1 CDFW has determined the community to be sensitive.

2 The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, S = state). The numbers have the following meaning:
1 = critically imperiled

2 = imperiled
3 = vulnerable to extirpation or extinction
4 = apparently secure
5 = demonstrably widespread, abundant, and secure
NA = not applicable
GNA = global rank not applicable
SNA = state rank not applicable
Unranked= Associations that are considered sensitive, but have not been ranked

[3] There are no temporary impacts associated with the BESS.

[4] Permanent impacts for the gen-tie are for access roads and tower pads.

[5] Includes both gen-tie options.

[6] Temporary impacts will occur due to the construction of the two (2) underground fiber optic lines within the Southern Gen-Tie Route corridor, within areas proposed for construction laydown areas for the gen-tie work, within pull areas from stringing the gen-tie, and within other gen-tie work areas that are outside of the transmission pole pads and access roads.

Four (4) sensitive vegetation communities have approximately 24.79 acres of direct impacts (includes both gen-tie options): *Artemisia tridentata* ssp. *parishii* association, *Eriogonum fasciculatum* var. *foliolosum-Juniperus californica* association, *Juniperus californica/Adenostoma fasciculatum-Eriogonum fasciculatum* association, and *Juniperus californica/herbaceous* association. There are approximately 23.08 acres of permanent impacts and approximately 1.71 acres of temporary impacts to these communities. Potential impacts to the three (3) sensitive vegetation communities could be considered potentially significant. MM-BIO-5 requires the establishment of a conservation area that contains up to approximately 76 acres of sensitive vegetation communities (California juniper woodland) that are available for preservation. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore the approximately 1.71 acres of temporarily impacted sensitive vegetation communities in the gen-tie portion of the Study Area. MM-BIO-~~1~~ 2 requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-~~2~~ 3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring that Project construction does not extend beyond Project limits. MM-BIO-~~3~~ 4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources, which will include a discussion about sensitive vegetation communities. Project implementation of MM-BIO-~~2~~1, MM-BIO-~~2~~3, MM-BIO-~~3~~4, MM-BIO-5, and MM-BIO-6 will reduce potential direct impacts to less than significant. Impacts will be **less than significant with mitigation**.

Indirect Impacts

Less than Significant with Mitigation. Potential short-term or temporary indirect impacts to sensitive vegetation located in the Study Area could result from construction activities and include impacts related to or resulting from the activities outside of the Project limits, generation of fugitive dust, increased human activity, and the introduction of pollutants from construction equipment. Excessive dust can decrease the vigor and productivity of plants through effects on light, penetration, photosynthesis, respiration, and transpiration; increased penetration of phytotoxic gaseous pollutants; and increased incidence of pests and diseases. Additionally, invasive plant species could be introduced by the Project during construction and through landscaping installation that could alter the habitat and compete with native vegetation. These indirect impacts could result in additional loss of sensitive vegetation communities that could be potentially significant. Water trucks are expected as part of Project construction, which will reduce fugitive dust. MM-BIO-~~9~~ 10 requires the preparation and implementation of a plan to avoid and minimize the introduction of non-native plant species that could compete for habitat space with native plants ensuring that vehicles and equipment used during construction are weed free. MM-BIO-~~2~~ 3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the Invasive Species Prevention Plan will be implemented. MM-BIO-~~3~~ 4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources, which will include a discussion on invasive plants. Project implementation of MM-BIO-~~2~~3, MM-BIO-~~3~~4, and MM-BIO-~~9~~ 10 will reduce potential indirect impacts to less than significant. Impacts will be **less than significant with mitigation**.

3.2.2.2.3 Would the project have a substantial adverse effect on federal or state protected WOTUS (including wetlands) as defined by Sections 404 and 401 of the 1972 Amendments to the Federal Water Pollution Control Act, commonly known as the Clean Water Act, or

the Porter-Cologne Act, either through direct removal, filling, hydrological alteration, or other means?

Direct Impacts

Less than Significant with Mitigation. As currently designed, the proposed Project will result in approximately 0.66 acres (approximately 0.33 acres temporary and approximately 0.33 acres permanent; includes both gen-tie options) of direct impacts to potential jurisdictional waters through the removal of vegetation and grading of land to construct the proposed Project. Temporary impacts will occur within areas proposed for construction laydown areas and within the gen-tie work areas that are outside of the transmission pole pads and access roads. The total acreage for project-related impacts to potential jurisdictional waters located within the development area are provided in Table 3.2-10, Summary of Potential Impacts to Potential Jurisdictional Waters.

Table 3.2-10. Summary of Potential Impacts to Potential Jurisdictional Waters

Jurisdiction	Potential Temporary Impact (Gross Acreage)[1]	Potential Permanent Impact (Gross Acreage)[1]
RWQCB/CDFW		
Features		
Non-Wetland Waters	0.32	0.33
Swales	0.01	0
RWQCB Total[2]	**0.33**	**0.33**

Notes: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.
1 Includes both gen-tie options.
2 Totals may not add up due to rounding.

Streams within the BESS area will be filled. Culverts will manage upstream off-site stormwater runoff throughout the overall Project site and will be used to manage flows previously routed through existing streams. Various culverts running beneath site access driveways will be used to bypass flows from upstream of the site. One existing 36-inch culvert allows runoff to flow south underneath Soledad Canyon Road towards the southern BESS yard. A manhole with an open grate will collect stormwater runoff at the downstream point of the existing 36-inch culvert. A new 60-inch storm sewer will be placed from the manhole to the downstream end of the site to convey upstream stormwater runoff from the BESS facilities. A hydraulic dissipator with riprap will be placed at the downstream site of the BESS facility. This can be seen on drawings PSR-CS-004 S011 and PSR-CS-004 S012 (TN 264472). A 72-inch culvert will also be placed to route stormwater runoff under the site. A manhole with an open grate will collect stormwater runoff and be conveyed, underground, downstream to the south of the substation site. A hydraulic dissipator with riprap will be placed at the downstream site of the substation. Sizing of the culverts, calculations, and figures with the locations of the structures can be seen in the Stormwater Management Report found in Appendix K of Appendix 3.15A, Water Quality Management Plan (TN264386).

There is a 36-inch culvert that conveys flows from NWW-1a across Soledad Canyon Road. The culvert is reinforced with concrete, will be maintained throughout construction, and will not be affected by Project-related traffic. The culvert will not be affected by construction and operation and is not expected to need repair. The downstream end of the culvert will be connected to a new manhole to provide continuation of the stormwater conveyance downstream of the BESS facility.

MM-BIO-~~10~~11, Jurisdictional Waters Compensation, will require the purchase of mitigation bank credits and/or turnkey projects with a mitigation bank at 3:1 for permanent impacts to jurisdictional waters, for a maximum of approximately 0.99 acres (dependent on which gen-tie option is used). MM-BIO-5 will preserve up to approximately 2.3 acres of jurisdictional waters in the Study Area parcels associated with the gen-tie routes. MM-BIO-6 will require the preparation of a restoration plan, its implementation, and a monitoring period to restore the approximately 0.33 acres of temporarily impacted jurisdictional waters. MM-BIO-~~2~~ 3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring that Project construction does not extend beyond Project limits. MM-BIO-~~3~~ 4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources, which will include a discussion about jurisdictional waters. Project implementation of MM-BIO-~~2~~3, MM-BIO-~~3~~4, MM-BIO-5, MM-BIO-6, and MM-BIO-~~10~~ 11 will reduce potential direct impacts to less than significant. Impacts will be **less than significant with mitigation**.

Indirect Impacts

Less than Significant. Potential temporary indirect impacts to the drainages in the Study Area and downstream waters could result from construction activities and will include potential impacts from the generation of fugitive dust and the potential introduction of chemical pollutants (including herbicides). Excessive dust can decrease the vigor and productivity of vegetation through effects on light, penetration, photosynthesis, respiration and transpiration, increased penetration of phytotoxic gaseous pollutants, and increased incidence of pests and diseases. Erosion and chemical pollution (releases of fuel, oil, lubricants, paints, release agents, and other construction materials) may affect wetlands/ jurisdictional waters. The release of chemical pollutants can reduce the water quality downstream and degrade adjacent habitats. However, during construction, erosion-control measures will be implemented as part of the storm water pollution prevention plan (SWPPP) for the Project. Because the entirety of the Project development footprint will be graded at one time but construction will occur over time in phases, the erosion measures will be maintained until all graded areas are constructed/landscaped. Prior to the start of construction activities, the Contractor is required to file a Permit Registration Document with the State Water Resources Control Board in order to obtain coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ, NPDES No. CAS000002) or the latest approved general permit. This permit is required for earthwork that results in the disturbance of 1 acre or more of total land area. The required SWPPP will mandate the implementation of best management practices to reduce or eliminate construction-related pollutants in the runoff, including sediment, for all exposed soils. Therefore, temporary indirect impacts will be **less than significant** due to compliance with regulations.

3.2.2.2.4 Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory native wildlife corridors or impede the use of wildlife nursery sites?

Less than Significant. Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The Study Area does not overlap with any California Essential Habitat Connectivity Areas or Natural Landscape (CDFW 2014, 2017). The Study Area is located adjacent to residential neighborhoods, Sierra Highway, the Southern Pacific Railroad lines, Carson Mesa Road, and SR-14, all of which have associated human presence. The Study Area does not support permanent or relatively permanent waters so fish movement is not expected. As such, no significant direct or indirect permanent impacts will occur on wildlife movement or use of native wildlife nursery sites associated with Project activities. Existing habitat linkages and wildlife corridor functions will remain intact while construction activities are conducted and following Project completion. Construction activities will not likely result in potential impacts to wildlife movement because no new structures that will impede wildlife movement are proposed.

During construction activities, temporary disturbance to local species may occur, but will not substantially degrade the quality or use of the vegetation communities in the vicinity. Some indirect impacts to localized wildlife movement could occur during construction activities due to construction-related noise. However, this impact will be temporary and will not be expected to significantly disrupt wildlife movement during and following construction activities.

During operation of the Project, the BESS and substation are located adjacent to residential neighborhoods, Sierra Highway, the Southern Pacific Railroad lines, Carson Mesa Road, and SR 14, so it is not expected to create a substantial new barrier between open natural lands to the east and west of the Study Area. The Project transmission facilities will be designed consistent with the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (APLIC 2006) and be evaluated for potential collision reduction devices in accordance with *Reducing Avian Collisions with Power Lines: The State of Art in 2012* (APLIC 2012), so bird migration through the Study Area is expected to continue.

Therefore, direct and indirect impacts on wildlife corridors and migratory routes resulting from the proposed Project will be **less than significant**.

3.2.2.2.5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

California Desert Native Plant Act

The Project would require the removal of chaparral yucca, Wiggin's cholla, and beavertail pricklypear, at the numbers indicated in Table 3.2-11, Impacts to California Desert Native Plant Act Covered Species.

Table 3.2-11. Impacts to California Desert Native Plant Act Covered Species

Species	Amount
chaparral yucca	843
Wiggins' cholla	543
beavertail pricklypear	85
Total	**1,471**

The applicant would get appropriate permits, tags, and seals that must be obtained from the designated County official or office that implements the California Desert Native Plant Act but for the CEC's Opt-In Application for Certification process, where the CEC's certification will be in lieu of any permits, tags, or seals issued by the County.

Additionally, the harvested individuals are expected to be used as part of the restoration plan required by MM-BIO-6 that would occur in the temporary impacted areas of the Project site.

County of Los Angeles Significant Ecological Area

Less than Significant with Mitigation. The portions of the Study Area east of the railroad tracks, south of Foreston Drive and the Vincent Substation, and east of the substation are within a County of Los Angeles SEA (County of Los Angeles 2025), as shown in Figure 3.2-8, Los Angeles County Significant Ecological Area. The SEA Ordinance establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights. The gen-tie line portion of the Project has the potential to impact resources within the Santa Clara River SEA including special-status wildlife, special-status wildlife foraging habitat, sensitive vegetation communities, Water Resources (i.e., streams), and protected trees.

Special-Status Plants

Two (2) special-status plant species, short-joint beavertail and golden linanthus, were mapped in the gen-tie route portion of the Study Area during surveys in 2023. None of the mapped individuals will be directly impacted by the Project. However, some of the individuals of both species are in close proximity to the Project construction limits. Two special-status plant species, Douglas' fiddleneck and Raven's blazing-star, were recorded on one day of the special-status plant surveys but were not mapped. As such the two species could be directly impacted in the gen-tie route portion of the Study Area during vegetation removal and grading activities if present. The loss of individuals during construction could be significant based upon the abundance of each being impacted and would require mitigation. MM-BIO-1 requires pre-construction surveys for the species to determine if the species are present and the collection of seeds should the species be present. MM-BIO-~~1~~2~~, Demarcation of Disturbance Limits,~~ requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-~~2~~3~~, Biological Monitoring,~~ requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the flagged limits are adhered to during construction. MM-BIO-~~3~~4~~, Worker Education Awareness Program,~~ requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and Study Area, and measures to avoid and minimize impacts to those resources. MM-BIO-5 requires the establishment of a conservation area that will preserve up to approximately 136 acres of native vegetation communities within the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include flora resources that the species could use. Project implementation of MM-BIO-1, MM-BIO-2, MM-BIO-3, MM-BIO-4, MM-BIO-5, and MM-BIO-6 will provide the mitigation for the Project to be compatible with SEA Resources.

Special-Status Wildlife

For all wildlife, MM-BIO-~~1~~ 2 requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-~~2~~ 3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the integrity of any buffers established for active nests. MM-BIO-~~3~~ 4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources. For Crotch's bumble bee, MM-BIO-~~4~~ 7 requires pre-construction surveys for the Crotch's bumble nests, with buffers established around active nests until the nests are deemed inactive. For special-status reptiles

MM-BIO-~~7~~ ~~8~~ will provide a process of clearance surveys and relocation of special-status wildlife into non-impacted portions of the Study Area. For nesting birds, including loggerhead shrike, Southern California rufous-crowned sparrow, and Bell's sage sparrow, MM-BIO-~~8~~ ~~9~~ requires pre-construction surveys and buffer establishment for active nests. Project implementation of MM-BIO-~~1~~2, MM-BIO-~~2~~3, MM-BIO-~~3~~4, MM-BIO-~~4~~7, MM-BIO-~~7~~8, and MM-BIO-~~8~~ ~~9~~ will provide the mitigation for the Project to be compatible with SEA Resources.

The Project will impact habitat that supports or has the potential to support several special-status species that are candidates for listing under CESA or are CDFW Species of Special Concern: Crotch's bumble bee, California legless lizard, Blainville's horned lizard, loggerhead shrike, Southern California rufous-crowned sparrow, and mountain lion. Each species is expected to have potentially suitable habitat in all of the native habitats in the Study Area, with the exception of California legless lizard, which is only expected in habitats with California juniper. Indirect impacts to these species will be from the substantial loss of foraging and breeding habitat, as shown in Table 3.2-12, Potential Impacts to Special-Status Wildlife Habitat Within the SEA.

Table 3.2-12. Potential Impacts to Special-Status Wildlife Habitat Within the SEA

Species	SEA Resource Category[1]	SEA Preservation Ratio[1]	Potential Impacted Habitat (acres)[2]	Restored Temporarily Impacted Habitat (Gross acreage)[2, 3]	Needed Conserved Habitat (Gross acreage)[2, 4, 5, 6]
Crotch's bumble bee	1	5:1	29.35[7]	25.91	120.84
California legless lizard	2	4:1	3.59[8]	2.67	11.69
Blainville's horned lizard	2	4:1	29.35[7]	25.91	91.49
loggerhead shrike	2	4:1	29.35[7]	25.91	91.49
greater roadrunner	3	3:1	29.35[7]	25.91	62.14
mountain lion	1	5:1	33.06[9]	29.26[10]	136.04

Notes: SEA = Significant Ecological Area.

1 Los Angeles County Planning 2020.
2 Includes impacts from both gen-tie options.
3 Restoration for areas that are temporary impacts (MM-BIO-6).
4 Total impacts multiplied by the ratio and minus the restored habitat (MM-BIO-5).
5 Includes preservation for impacts from both gen-tie options.
6 Acreages are not additive. Conserved habitat needed is overlapping since the species share suitable habitat, so the 136.04 acres for mountain lion will cover all species.
7 Includes all native habitats impacted, as listed in Table 3.2-13.
8 Includes all habitats that support California juniper, as listed in Table 3.2-13.
9 Includes all native habitats and disturbed habitat impacted, as listed in Table 3.2-13.
10 Includes all restoration of native habitats and disturbed habitats.

MM-BIO-5 requires the establishment of a conservation area that will preserve up to approximately 136 acres of native vegetation communities within the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include flora resources that the species could use. MM-BIO-~~1~~ ~~2~~ requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-~~2~~3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring that Project construction does not extend beyond Project limits. MM-BIO-~~3~~ ~~4~~ requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to

those resources, which will include a discussion about sensitive vegetation communities. Project implementation of MM-BIO-~~1~~2, MM-BIO-~~2~~3, MM-BIO-~~3~~4, MM-BIO-5, and MM-BIO-6 will provide the mitigation for the Project to be compatible with SEA Resources.

Vegetation Communities

Table 3.2-13, Potential Impacts to Vegetation Communities and Land Covers in the Santa Clara River Significant Ecological Area Portion of the Study Area, summarizes the Project's potential direct impacts to vegetation communities and land covers in the Santa Clara River SEA. There will be approximately 3.44 acres of permanent impacts and approximately 25.91 acres of temporary impacts, which includes both gen-tie options. Potential direct impacts will occur due to removal of vegetation, alteration of soils from grading, and the development of the Project.

Table 3.2-13. Potential Impacts to Vegetation Communities and Land Covers in the Santa Clara River Significant Ecological Area Portion of the Study Area

Alliance	Association	SEA Category[1]	Ratio[1]	Permanent Impacts (gross acreage)[2]	Temporary Impacts (gross acreage)[2]	Total Impacts (gross acreage)[2]
Native Communities						
Cheesebush – sweetbush scrub	*Ambrosia salsola - Larrea tridentata*	4	2:1	–	0.05	0.05
	Ambrosia salsola Association	4	2:1	–	1.57	1.57
California sagebrush – (purple sage) scrub	*Artemisia californica - Eriogonum fasciculatum*	4	2:1	–	1.15	1.15
Big sagebrush	*Artemisia tridentata - Ericameria nauseosa*	4	2:1	0.46	2.21	2.67
	Artemisia tridentata ssp. *parishii*	4	2:1	–	0.20	0.20
Fourwing saltbush scrub	*Atriplex canescens*	4	2:1	2.07	18.09	20.15
Rubber rabbitbrush scrub	*Ericameria nauseosa - Juniperus californica* / herb	4	2:1	–	1.12	1.12
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum - Eriogonum fasciculatum*	3	3:1	0.53	0.35	0.87
	Juniperus californica / herbaceous	3	3:1	0.39	1.16	1.55

Table 3.2-13. Potential Impacts to Vegetation Communities and Land Covers in the Santa Clara River Significant Ecological Area Portion of the Study Area

Alliance	Association	SEA Category[1]	Ratio[1]	Permanent Impacts (gross acreage)[2]	Temporary Impacts (gross acreage)[2]	Total Impacts (gross acreage)[2]
			Total:	3.44	25.91	29.35[3]

Notes: Totals may not add up due to rounding.
1 SEA Ordinance Implementation Guide (Los Angeles County Planning 2020).
2 Includes impacts from both gen-tie options and permanent and temporary impacts.
3 There are also 3.70 acres of Disturbed Habitat and 2.18 acres of Urban/Developed.

MM-BIO-5 requires the establishment of a conservation area that will preserve up to approximately 136 acres of native vegetation communities within the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore up to the approximately 26 acres of temporarily impacted areas within the conservation area. Project implementation of MM-BIO-5 and MM-BIO-6 will provide the preservation needed for the Project to be compatible with SEA Resources.

Water Resources

The Project will have potential impacts to approximately 0.34 acres (approximately 0.01 permanent impacts and 0.33 acres temporary impacts) of SEA Water Resources (i.e., streams and swales), which includes both gen-tie options. Potential direct impacts will occur due to grading and the development of the Project. Water Resources are to be preserved at 5:1, resulting in the need for 1.70 acres of preservation. MM-BIO-5 requires the establishment of a conservation area that will preserve up 2.28 acres of unimpacted Water Resources in the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore an additional approximately 0.33 acres of temporarily impacted Water Resources within the conservation area. Project implementation of MM-BIO-5 and MM-BIO-6 will provide the preservation needed for the Project to be compatible with SEA Resources.

Protected Trees

Direct impacts are associated with tree removal or encroachment within the tree protected zone (i.e., canopy dripline plus 5 feet or 15 feet from trunk, whichever is greater; TPZ) of a protected tree. Specifically, potential tree impacts were determined using geographic information system technology, spatial locations of tree crowns, and a minimum distance of each tree relative to the Project impact. A tree is considered removed if it falls within the Project's limits of disturbance or if 30% or more of its TPZ is impacted. The TPZ is defined as 5 feet beyond the dripline or 15 feet from the trunk, whichever is greater. A tree is considered encroached upon if less than 30% of its TPZ is affected by Project activities, including soil or root disturbance and/or pruning, but the tree is not removed, and a tree is considered preserved it they are not removed and do not experience any TPZ disturbance. Impact totals presented herein are based on proposed disturbance limits, fuel modification zones, and development plans as of the date of this report. The following tree impact findings are organized into two categories: non-heritage tree impacts and heritage tree impacts. Heritage tree status is based on the SEA tree classifications (i.e., riparian, coniferous, upland hardwood) and minimum trunk diameter for protected and heritage trees.

Appendix A, Protected Tree Report, of Appendix 3.2G, Biota Report, provides all of the details of the impacts to SEA Protected Trees.

Non-Heritage Tree Impacts (Protected Trees)

~~Forty~~Fifty~~-~~seven protected non-heritage trees could be directly impacted by the proposed Project. The ~~47~~ 57 protected non-heritage tree impacts consist of ~~38~~ 48 potential removals (trees that are within the grading limits or grading activities affect more than 30% of a TPZ), nine (9) potential encroachments (trees that are not removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds are anticipated). The nine (9) potential encroachment trees have encroachments that range from 0.92~~1~~% to 30~~24~~%. The remaining ~~906~~ 948 protected non-heritage trees would not be directly impacted by the Project. Table 3.2-14, Summary of Potential Impacts to SEA Protected Trees (Non-Heritage), provides a summary of the potential impacts to non-heritage SEA Protected Trees within and adjacent to the Project.

Table 3.2-14. Summary of Potential Impacts to SEA Protected Trees (Non-Heritage)

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Juniperus californica	California juniper	~~38~~ 46	9	~~47~~ 55
Fraxinus velutina	velvet ash	1	0	1
Juglans californica	Southern California black walnut	1	0	1
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
	Total	~~38~~ 48	9	~~47~~ 57

Note: SEA = Significant Ecological Area.

Heritage Tree Impacts

California juniper, which have naturally thin trunks, must have a canopy spread of 35 feet to be designated as a heritage tree (Los Angeles County Planning 2020). A total of ~~68~~ 73 heritage trees are found on the Project site, of which eight (8) could be directly impacted by the Project. The eight (8) heritage tree comprise ~~six~~ seven (76) potential removals and ~~two~~ one (12) potential encroachments. The remaining ~~60~~ 65 heritage trees would not be directly impacted by the Project. Table 3.2-15, Summary of Potential Impacts to SEA Protected Heritage Trees, provides a summary of the potential impacts to SEA protected heritage trees within and adjacent to the Project.

Table 3.2-15. Summary of Potential Impacts to SEA Protected Heritage Trees

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Juniperus californica	California juniper	~~6~~ 7	~~2~~ 1	8
Fraxinus velutina	velvet ash	0	0	0
Juglans californica	Southern California black walnut	0	0	0
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
	Total	~~6~~ 7	~~2~~ 1	8

Note: SEA = Significant Ecological Area.

Per the County requirements, the removal of any SEA Protected Tree requires mitigation in the form of two (2) replacement plantings, and the removal of a heritage tree requires mitigation in the form of 10 replacement plantings. Replacement trees should be seedlings of the same species as those being removed and should be planted in an area of the Project site where there is suitable habitat and where the trees would be able to remain in perpetuity. As such, based on the August 2025 impact analysis (updated in December 2025) that identified ~~44~~ 55 potential direct tree removals (~~six~~ seven [76] heritage trees and ~~38~~ 48 non-heritage protected trees), the SEA rules may require up to ~~136~~ 166 mitigation trees (depending on actual Project impacts based on final design and the selected gen-tie route) to be planted in an area of the Project site where there is suitable habitat and where the trees would be able to remain in perpetuity. Per the County, Table 3.2-16, Summary of Potential Individual Species Replacement Quantities, details the quantity of each species required for planting.

Table 3.2-16. Summary of Potential Individual Species Replacement Quantities

Scientific Name	Common Name	Total Impacted	Replacement Ratio	Total Replacement Required
Juniperus californica	California juniper	~~38~~ 46	2:1	~~76~~ 92
Juniperus californica (Heritage Tree)	California juniper	~~6~~ 7	10:1	~~60~~ 70
Fraxinus velutina	velvet ash	1	2:1	2[1]
Juglans californica	Southern California black walnut	1	2:1	2[1]
	Totals	~~44~~ 55	N/A	~~136~~ 166

Note: [1] The velvet ash and Southern California black walnut that would be impacted by the Project are ornamental trees associated with a residence and these species do not typically occur in the habitats in the Study Area, so California juniper would be used for the replacement of these species.

MM-BIO-5 requires the establishment of a conservation area. The currently contemplated conservation area has the potential to preserve up to 749 California junipers. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas within the conservation area including areas mapped as California juniper woodland. Up to 166 ~~136~~ replacement California juniper would be planted and monitored as part of the implementation of MM-BIO-6. Project implementation of MM-BIO-5 and MM-BIO-6 will provide the preservation needed for the Project to be compatible with SEA Resources.

Impacts will be **less than significant with mitigation**.

Significant Ecological Areas Statement of Findings

A Be highly compatible with the SEA Resources, including the preservation of natural open space areas and providing for the long-term maintenance of ecosystem functions.

The Santa Clara River SEA (the "SCR SEA") covers approximately 45,496 acres and its overall boundaries extend upstream along several major tributary creeks and where contiguous drainage areas connect to the river basin through open habitat. On a regional basis, the SCR SEA contains biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution. native grassland, coast live oak riparian forest, southern willow scrub, bigcone spruce-canyon oak forest, southern sycamore-alder woodland, southern cottonwood-willow riparian woodland and forest, freshwater marsh, alluvial fan sage scrub, and vernal pool. (PCR 2000).

The portions of the Project within the SCR SEA consist of an approximately 1.1-mile-long or 1.8-mile-long new gen-tie line. There will be a maximum of approximately 11 monopole or steel lattice tower structures. The proposed transmission structures were sited to avoid potential impacts to environmental resources. Where possible, the transmission structure access path will utilize existing access roads to minimize new ground disturbance. Fiber optic or other cabling required for the monitoring system typically will be installed in buried conduit within the access road or planned trenching.

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines that create a small footprint (4.12 acres) within the SCR SEA following the completion of construction activities. MM-BIO-5 requires the establishment of a conservation area that will preserve up to approximately 162 acres of native vegetation communities within the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include flora resources that the species could use.

B Avoid or minimize impacts to the SEA Resources and wildlife movement through one or more of the following:

1 Avoiding habitat fragmentation;

The monopole or steel lattice tower structures, access roads, and buried lines create a small footprint within the SCR SEA following the completion of construction activities, and with the restoration of the temporary impacted areas, the Project is not expected to fragment the habitats with the Study Area. Wildlife is expected to be able to pass through the Project post-construction, because the transmission lines are not a barrier to movement.

2 Minimizing edge effects; or

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines create a small footprint (approximately 4.12 acres) within the SCR SEA following the completion of construction activities. The approximately 32.25 acres of temporary impacts produced by the Project will be restored per MM-BIO-6 and MM-BIO-5 will conserve up to approximately 162 acres of natural habitat. During the operation of the Project, maintenance work on the gen-tie and associated infrastructure is expected to be infrequent, so indirect impacts to wildlife are expected to be low.

3 Siting development in the least sensitive location.

The Project has been sited to avoid impacts to special-status plants and only have temporary impacts to Water Resources, which will be restored per MM-BIO-6.

C Buffer important habitat areas from development by retaining sufficient natural vegetation cover and/or natural open spaces and integrating sensitive design features;

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines create a small footprint (approximately 4.12 acres) within the SCR SEA following the completion of construction activities. The approximately 32.25 acres of temporary impacts produced by the Project will be restored per MM-BIO-6 and MM-BIO-5 will conserve up to approximately 162 acres of natural habitat.

D Maintain the ecological and hydrological functions of water bodies, watercourses, and their tributaries;

The gen-tie portion of the Project will impact approximately 0.20 acres of ephemeral Water Resources within the SCR SEA. The approximately 0.19 acres of temporary impacts produced by the Project will be restored per MM-BIO-6 and MM-BIO-5 will conserve up to approximately 0.97 acres of Water Resources.

E Ensure that roads, access roads, driveways, and utilities do not conflict with Priority Biological Resources, habitat areas or migratory paths; and

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines create a small footprint (approximately 4.12 acres) within the SCR SEA following the completion of construction activities. The Project has potential impacts to Priority Biological Resources (SEA Resource Categories 1 through 3) in the form special-status plants and wildlife, water resources, and vegetation communities; however, all such impacts are mitigated in accordance with SEA ordinance and CEQA guidelines.

The Project transmission facilities will be designed consistent with the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (Avian Power Line Interaction Committee [APLIC] 2006) where feasible. Transmission facilities will also be evaluated for potential collision reduction devices in accordance with *Reducing Avian Collisions with Power Lines: The State of Art in 2012* (APLIC 2012). Based upon the low volume of human activity and the proposed avian protecting Project design features, potential impacts to wildlife habitat and movement during Project operation are expected to be less than significant.

F Promote the resiliency of the SEA to the greatest extent possible. For purposes of this finding, SEA resiliency cannot be preserved when the proposed development may cause any of the following:

1 Significant unmitigated loss of contiguity or connectivity of the SEA;

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines create a small footprint (approximately 4.12 acres) within the SCR SEA following the completion of construction activities. The approximately 32.25 acres of temporary impacts produced by the Project will be restored per MM-BIO-6 and MM-BIO-5 will conserve up to approximately 162 acres of native vegetation communities within the SEA.

2 Significant unmitigated impact to a Priority Biological Resource;

The Project has potential impacts to Priority Biological Resources (SEA Resource Categories 1 through 3) in the form special-status plants and wildlife, water resources, and vegetation communities; however, all such potential impacts are mitigated in accordance with SEA ordinance and CEQA guidelines. A total of 10 preservation, avoidance, and minimization measures have been provided as a part of the Project (MM BIO-1 through BIO-10), including: conserving in perpetuity approximately 162 of on-site natural open space; requiring pre-construction surveys, planning, and biological monitoring during construction; measures protecting against invasive species establishment and spread; preparation of conservation management plans; nesting bird avoidance; and strategically locating development as close as possible to existing urban uses/infrastructure. These measures serve to preserve and limit potential impacts to Priority Biological Resources. As such, potential impacts to Priority Biological Resources will be reduced to less than significant.

3 Removal of habitat that is the only known location of a new or rediscovered species; or

No new or rediscovered species are present on the Project site. As such, the Project complies with this finding.

4 Other factors as identified by SEATAC.

Not applicable due to the CEC Opt-In process.

Impact 3.2-6 Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Study Area is not within any HCP, NCCP, or other approved local, regional, or state HCP (CDFW 2023b). Therefore, there are **no impacts** to HCP, NCCP, or other approved local, regional, or state HCP.

3.2.3 Cumulative Effects

Cumulative effects on biological resources because of past, present, and reasonably foreseeable future actions, in combination with the Project, can result from loss of habitat and habitat disturbance and degradation. A cumulative impact refers to a project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the facility (Public Resource Code [PRC] Section 21083; 14 CRR 15064(h), 16065(c), 15130, and 15355). Cumulative impacts from the Project are expected to be **less than significant**.

3.2.4 Mitigation Measures

The following section describes the measures that are intended to avoid and minimize potential adverse effects of the Project to biological resources.

3.2.4.1 Mitigation Measures for Construction and Decommissioning

The following section presents avoidance, minimization, and mitigation measures to avoid, minimize, or mitigate potentially significant impacts to all special-status plant and wildlife species and other sensitive biological or aquatic resources during the construction and operations phases of the proposed Project.

MM-BIO-1 Pre-Construction Special-Status Plant Species Survey and Seed Collection. Prior to the beginning of vegetation removal and grading, CEC-approved biologists shall conduct a focused rare plant survey for Douglas' fiddleneck and Raven's blazing-star during the appropriate blooming period (March through May). Reference site checks will be made for the species to determine if the species are blooming in the Project vicinity. The surveys will conform to CNPS' Botanical Survey Guidelines; CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities; and USFWS' Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants.

Should any of the species be found at a count of 20 or higher, then construction of the occupied location shall be delayed until the individuals have gone to seed. Seeds shall be collected once the seed has matured, but prior to the seed capsules opening to disperse the seed. Seeds shall be stored in breathable paper bags in a cool, dry, and dark place. The seeds will then be used in the habitat restoration for the Project (see MM-BIO-6).

MM-BIO-2 Demarcation of Disturbance Limits. Prior to commencement of ground disturbing activities for each phase of Project construction, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary high visibility construction fence), as recommended by the CEC-approved Biological Monitor. All construction activities including equipment staging and maintenance shall be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive vegetation communities outside the limits of work. The flagging shall be maintained throughout construction.

MM-BIO-~~2~~ 3 Biological Monitoring. Prior to ground disturbing activities, the Applicant shall submit the qualifications of potential Biological Monitor(s) to the CEC for review and approval. The CEC-approved Biological Monitors will monitor construction activities and ensure compliance with all mitigation measures. The Biological Monitors shall be present on site during all vegetation removal and each day prior to the commencement of grading activities. The Biological Monitors shall be responsible for conducting a pre-construction clearance survey and any special-status species shall be relocated to areas of the Study Area that will not be impacted by the Project (see MM-BIO-5). Pre-construction clearance surveys shall be conducted prior to construction of each new phase of the development. The Biological Monitors shall monitor to ensure that wildlife does not become entrapped in excavation or trenching areas. Safeguards shall be implemented during daytime periods of non-activity and overnight, such as placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction shall be halted until a Biological Monitor arrives on site and clears the work area (in compliance with all applicable permits and authorizations).

The Biological Monitors shall regularly inspect the Project site as needed after the completion of all grading activities. Monthly spot-check monitoring is anticipated to be required throughout the construction of the Project for those areas that are graded but not yet developed/landscaped. During monthly visits, a Biological Monitor shall address the following: (1) the potential establishment of invasive species and require weed abatement (if necessary) in accordance with MM-BIO-10; (2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; and (3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources.

Daily monitoring reports shall be prepared by the Biological Monitors that document the results of any surveys conducted, wildlife relocations, construction activities performed, compliance issues observed, corrective actions taken during the reporting period. The monitoring reports shall include photos as appropriate and be made available to the CEC at their request. Following the completion of the Project construction, a Construction Monitoring Report will be prepared by the Applicant to document compliance with the minimization measures and permit conditions for the Project.

MM-BIO-~~3~~4 Worker Education Awareness Program (WEAP). Prior to the initiation of the initial ground disturbing activities, all personnel associated with those activities shall attend a worker education awareness program (program) prepared by a CEC-approved qualified biologist. In general, the program shall discuss any potentially occurring sensitive biological resources or species and habitat preference(s), occupied habitat in the area, life histories, as well as potential construction impacts, protection measures, and Project limits. Legal protections and regulations pertinent to the biological resources that may be present shall also be included in the program. A species and

habitat fact sheet shall be developed prior to the training program and distributed at the training program to all contractors, employers and other personnel involved with the construction of the Project.

After the kickoff meeting, the Project Applicant shall notify the CEC-approved qualified biologist in advance if additional contractors are employed during the initial vegetation removal or initial grading activities. A sign-in sheet will be circulated for signatures to all personnel that attend the workers educational training to confirm that program materials were received and that they understand the information presented.

~~MM-BIO-4 Crotch's Bumble Bee Avoidance and Minimization Measures. If Crotch's bumble bee is still a candidate for listing under the California Endangered Species Act (CESA) or has been listed under CESA at the time of the start of construction of the Project, a pre-construction survey for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of initial ground disturbing activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). If construction commences outside of that period (November 1 through January 31), surveys would not be warranted since the daughter queens (gynes) disperse following a nest's lifecycle and conducting surveys for dormant gynes would not be practical.~~

~~The pre-construction survey will be based on recommendations described in the "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species," released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The pre-construction survey will be performed by a biologist with expertise in surveying for bumble bees and include at least three (3) survey passes that are not on sequential days or in the same week. The biologist shall watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence will be apparent after five minutes of observation.~~

~~During the bumble bee active nesting season (April 1 through August 30), the CEC-approved Biological Monitors (MM-BIO2) shall continue to conduct daily sweeps of areas proposed for initial vegetation removal and ground disturbance.~~

~~If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 50 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). The CEC-approved Biological Monitors (MM-BIO2) shall ensure that the nest buffer is complied with during that period. Outside of the nesting season, it is assumed that no live individuals will be present within the nest as the gynes usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to proposed open space or other suitable areas beyond that have suitable hibernacula resources. Because construction will have occurred in the area outside of the occupied nesting resources, no suitable habitat will be present in the impact area, and it is assumed that new queens will disperse to habitat outside of the construction area.~~

~~If the nest resources cannot be avoided, as outlined in this measure, the project applicant will consult with CEC and CDFW regarding the need to obtain an Incidental Take Permit. In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. The compensatory habitat mitigation would be accomplished by onsite preservation of suitable habitat.~~

MM-BIO-5 On-Site Preservation. The Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code section 815.1, that permanently preserves up to approximately 136 acres of non-impacted vegetation communities and up to approximately 26 acres of temporary impacted areas that will be restored within the Project boundaries for long-term conservation and management as a natural conservation area ("Conservation Area"). The Conservation Area will be up to approximately 162 acres and located within portions of the Study Area within the Santa Clara River Significant Ecological Area. Table 3.2-17, Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved, summarizes the potential vegetation communities and land cover that could be preserved.

Table 3.2-17. Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved

Alliance	Association	SEA Category[1]	Acres
Vegetation Communities			
Cheesebush – sweetbush scrub	*Ambrosia salsola - Larrea tridentata*	4	0.82
	Ambrosia salsola Association	4	2.60
Big sagebrush	*Artemisia tridentata - Ericameria nauseosa*	4	14.04
	Artemisia tridentata - Eriogonum fasciculatum	4	0.06
	Artemisia tridentata ssp. *parishii*	4	0.48
Fourwing saltbush scrub	*Atriplex canescens*	4	66.69
Mormon tea scrub	*Ephedra viridis*	4	1.99
Rubber rabbitbrush scrub	*Ericameria nauseosa - Juniperus californica* / herb	4	3.85
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum - Eriogonum fasciculatum*	3	5.60
	Juniperus californica / herbaceous	3	69.90
		Vegetation Communities Subtotal:	*166.03*
Land Cover Types			
Disturbed Habitat	NA	NA	6.39
Urban Developed	NA	NA	2.76

Table 3.2-17. Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved

Alliance	Association	SEA Category[1]	Acres
		Land Cover Types Subtotal:	*9.15*
		Total:	**175.18**

Notes: NA=Not Applicable; totals may not add up due to rounding
1 SEA Ordinance Implementation Guide (County Planning 2020).

A cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a Project-specific Property Analysis Record (PAR) to calculate the costs of in-perpetuity land management. The PAR will take into account all management activities required if an Incidental Take Permit for Crotch's bumble bee is needed for the Project.

The conservation easement holder shall be an entity which has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code section 65968(b).

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the conservation area will be prepared and submitted to the CEC for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP will set forth requirements that will be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area, and may include the following: (1) there shall be no grading or other construction activities within the Conservation Area, except for the proposed habitat enhancement/restoration; (2) no fencing or other barriers to wildlife movement shall be installed; (3) commercial honeybee operations shall not be allowed to use the Conservation Area for storing their apiaries; (4) rodenticides shall be prohibited; (5) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council & Pesticide Research Institute's Best Management Practices (BMPs) for Wildland Stewardship[1]; (6) at least one annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (13) collect and remove trash, repair vandalized signs, and rectify trespass impacts; and (14) provide annual reporting that document the conditions of the Conservation Area. Approved work will be outlined in

1 California Invasive Plant Council & Pesticide Research Institute. 2015. Best Management Practices (BMPs) for Wildland Stewardship. Accessed October 2023. https://cal-ipc.org/docs/bmps/dd9jwo1ml8vttq9527zjhek99qr/BMPHerbicide.pdf.

the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated.

MM-BIO-6 Habitat Mitigation and Monitoring Plan. Prior to ground disturbing activities, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area in the Conservation Area, and short-joint beavertail transplant location, and will outline detailed performance standards and monitoring requirements for each; following the monitoring and reporting methods and performance standards listed below. The HMMP shall be submitted to and approved by the CEC prior to the onset of Project-related ground-disturbing activities. The acreages allotted for on-site establishment apply to approximately 32 acres within the Conservation Area that includes 0.19 acres of ephemeral streams. Up to ~~136~~ 166 California juniper will be planted, and individuals of the plant species covered by the California Desert Native Plant Act will be evaluated to be used in the installation of native plants. The HMMP shall set out measures for habitat restoration/enhancement implementation, including but not limited to:

- Identification of proposed plant materials
- Signage in the habitat restoration area
- Schedule for habitat restoration/enhancement work
- Use of pesticides and elimination of non-native vegetation
- Habitat monitoring and reporting
- Performance standards

MM-BIO-7 Crotch's Bumble Bee Avoidance and Minimization Measures. If Crotch's bumble bee is still a candidate for listing under the California Endangered Species Act (CESA) or has been listed under CESA at the time of the start of construction of the Project, a pre-construction survey for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of initial ground disturbing activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). If construction commences outside of that period (November 1 through January 31), surveys would not be warranted since the daughter queens (gynes) disperse following a nest's lifecycle and conducting surveys for dormant gynes would not be practical.

The pre-construction survey will be based on recommendations described in the "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species," released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The pre-construction survey will be performed by a biologist with expertise in surveying for bumble bees and include at least three (3) survey passes that are not on sequential days or in the same week. The biologist shall watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence will be apparent after five minutes of observation.

During the bumble bee active nesting season (April 1 through August 30), the CEC-approved Biological Monitors (MM-BIO2) shall continue to conduct daily sweeps of areas proposed for initial vegetation removal and ground disturbance.

If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 50 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). The CEC-approved Biological Monitors (MM-BIO-3) shall ensure that the nest buffer is complied with during that period. Outside of the nesting season, it is assumed that no live individuals will be present within the nest as the gynes usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to proposed open space or other suitable areas beyond that have suitable hibernacula resources. Because construction will have occurred in the area outside of the occupied nesting resources, no suitable habitat will be present in the impact area, and it is assumed that new queens will disperse to habitat outside of the construction area.

If the nest resources cannot be avoided, as outlined in this measure, the project applicant will consult with CEC and CDFW regarding the need to obtain an Incidental Take Permit. In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. The compensatory habitat mitigation would be accomplished by onsite preservation of suitable habitat.

MM-BIO-~~7~~8 Special-Status Wildlife Relocation Plan. Prior to commencement of any ground disturbing activities or the pre-construction staging of equipment on the Project site, the Project Applicant shall contract with a CEC-approved biologist to develop a Preconstruction Wildlife Survey and Relocation Plan for terrestrial reptiles, including California legless lizard and Blainville's horned lizard. The Preconstruction Wildlife Survey and Relocation Plan shall be submitted to the CEC for review prior to any ground-disturbing activities within potentially occupied habitat.

The Plan shall include, at a minimum, the following:

- Protocols for pre-construction surveys to flush out and/or move identified special status wildlife within the Project site, as feasible.
- Relocation to the portions of the Study Area outside of the Project construction limits and within the Conservation Area.
- The timing, frequency, and locations where surveys should be conducted.
- Surveys will be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity.
- Surveys shall be conducted in all areas anticipated to be subject to vegetation clearing.
- The habitat and conditions in the proposed relocation site(s).
- The methods that will be used for trapping and relocating identified species.
- All equipment used in the effort will be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens.[2]

[2] Julian et al. 2020. Minimizing the Spread of Herpetofaunal Pathogens in Aquatic Habitats by Decontaminating Construction Equipment. Herpetological Review, 2020, 51(3), 472–483. https://parcplace.org/wp-content/uploads/2020/11/Julian-2020-Decontamination-for-Herps-for-large-equipment.pdf.

- Any wildlife handling and relocation methodology from the CDFW-issued Streambed Alteration Agreement, if any, will be incorporated in the Preconstruction Survey and Relocation Plan.
- Protocols for documentation/recordation of the species and number of animals relocated.
- Relocations shall be logged and made available to the CEC, if requested.
- Protocols for notifying CDFW if identified species cannot be relocated.
- Attempts at relocation shall be logged and notification shall occur within 24 hours.
- The timing and frequency of reports documenting the results of the surveys.

MM-BIO-~~8~~9 Nesting Bird Avoidance. Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code consistent with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds and nesting raptors to avoid impacts to nesting birds and raptors.

For the remaining Project activities initiated during the breeding season for nesting birds and nesting raptors , a pre-construction survey shall be conducted by the Biological Monitor (MM-BIO-3) for nesting birds and/or raptors within three days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors. If the Biological Monitor does not find any active nests immediately adjacent to the impact areas, the Project activity shall be allowed to proceed.

If the Biological Monitors find an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitors shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the CEC upon completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitors and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed.

MM-BIO-~~9~~10 Invasive Species Prevention Plan. To prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the Project, the following measures shall be implemented:

- The WEAP (see MM-BIO-~~3~~4) will include invasive species prevention measures implemented by the Project.

- All mobile vehicles and construction equipment shall be washed prior to entering the Project site in an upland location where any seed material from invasive species will be contained and not carried onto the Project site. Logs of the washing will be submitted monthly to the CEC.
- Following the completion of grading activities, for those areas of the Project site that are graded but not yet developed/landscaped, the City-approved Biological Monitor shall conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM BIO-~~2~~3). If abundant invasive species are identified, the Biological Monitor shall inform the construction contractor about the infested area and recommend that the invasive species be removed. The recommendation will be included in the daily report.
- All vegetative material removed from the Project footprint shall be transported in a covered vehicle and will be disposed of at a certified disposal site.

MM-BIO-~~10~~11 Jurisdictional Waters Compensation. Mitigation for up to approximately 0.99 acres of jurisdictional waters shall be implemented through off-site acquisition, such as mitigation bank credits, and/or turnkey projects with mitigation banks (as approved by the CEC) following the issuance of permits from the U.S. Army Corps of Engineers, and Los Angeles Regional Water Quality Control Board, as applicable, and those agencies approval of the mitigation bank, and prior to the issuance of the grading permit. A turnkey mitigation project (establishment of the riparian habitat) will be used should credits not be available at the time of the jurisdictional waters permitting.

3.2.4.2 Mitigation Measure for Site Restoration

Over the long term, once the Project facilities are no longer needed, the structures will be removed the Project area will be in accordance with the approved decommissioning plan. Because rehabilitation of the site is not expected to occur for approximately 40 years, a draft conceptual plan may be included as part of the Biological Resources Mitigation Implementation and Minimization Plan. This draft plan can then be updated at a later date (but no more than one (1) year prior to closure). A formal rehabilitation plan for the Project facility closure will be developed by the Project owner and submitted to the CEC Compliance Manager at least one (1) year prior to facility closure. The facility closure restoration plan will include the following sections and details:

- Goals and objectives of the restoration
- A description of methods employed to achieve the restoration goals and objectives
- Success criteria used to determine whether the restoration was successful
- A monitoring and maintenance program, including details on remedial measures
- A description of annual reporting
- A restoration implementation and monitoring timeline and schedule of planned activities.

3.2.5 Laws, Ordinances, Regulations, and Standards

The following subsections within Section 3.2.5 describe the laws, ordinances, regulations, and standards (LORS) that apply to potential impacts on biological resources in the Project area and list the agencies responsible for enforcing the regulations. A summary of the applicable federal, state, and local LORS is provided in Table 3.2-18, LORS Applicable to Biological Resources.

Table 3.2-18. LORS Applicable to Biological Resources

LORS	Applicability	Conformity	Opt-In Application Reference
Federal			
Federal ESA (16 USC 1531 et seq.)	Designates and protects federally threatened and endangered plants and animals and their critical habitat. Applicants for projects that could results in adverse impacts on any federally listed species are required to consult with and mitigate potential impacts in consultation with USFWS.	**Yes**. Federally threatened and endangered plants and animals analyzed. Avoidance, minimization, and mitigation measures include preconstruction surveys, avoidance buffers, timing restrictions, and take authorization from the USFWS, if necessary.	Section 3.2.1.9 Section 3.2.1.10 Section 3.2.2.2.1 Section 3.2.5.1
MBTA (16 USC 703 to 711)	Protects all migratory birds, including nests and eggs	**Yes**. Pre-construction surveys and avoidance buffers for active nests will prevent impacts to nesting migratory birds.	Section 3.2.1.11 Section 3.2.2.2.1 Section 3.2.5.1
Bald and Golden Eagle Protection Act (16 USC 668)	Specifically protects bald and golden eagles from harm or trade in parts of these species	**Yes**. Pre-construction surveys and avoidance buffers will prevent take of eagles.	Section 3.2.1.12 Section 3.2.2.2.1 Section 3.2.5.1
State			
CESA (Fish and Game Code Section 2050 et seq.)	Species listed under this act cannot be “taken” or harmed, except under specific permit. Take in the context of CEQA means to hunt, pursue, kill, or capture as well as any other actions that may result in an adverse impact when attempting to take a listed species.	**Yes**. State threatened and endangered plants and animals analyzed. Avoidance, minimization, and mitigation measures include preconstruction surveys, avoidance buffers, timing restrictions, and take authorization from the CEC/CDFW if necessary.	Section 3.2.1.9 Section 3.2.1.10 Section 3.2.2.2.1 Section 3.2.5.2

Table 3.2-18. LORS Applicable to Biological Resources

LORS	Applicability	Conformity	Opt-In Application Reference
Game Code Section 3511	Describes bird species, primarily raptors that are FP (Fully Protected). FP birds may not be taken or possessed, except under specific permit requirements.	**Yes.** No take of FP bird species is anticipated.	Section 3.2.1.10 Section 3.2.2.2.1 Section 3.2.3.2
Fish and Game Code Section 3503	States that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.	**Yes**. Preconstruction surveys and avoidance buffers prevent impacts to nesting birds.	Section 3.2.1.10 Section 3.2.2.2.1 Section 3.2.5.2
Fish and Game Code Section 3503.5	It is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation made pursuant thereto.	**Yes.** Preconstruction surveys and avoidance buffers will prevent impacts to nesting raptors.	Section 3.2.1.10 Section 3.2.2.2.1 Section 3.2.5.2
Fish and Game Code Section 3513	It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act.	**Yes.** Preconstruction surveys and avoidance buffers prevent impacts to migratory birds.	Section 3.2.1.11 Section 3.2.2.2.1 Section 3.2.5.2
Fish and Game Code Sections 351, 4700, 5050, and 5515	Lists bird, mammal, amphibian, reptile, and fish species that are FP in California	**Yes.** FP species discussed. No take of FP species anticipated.	Section 3.2.1.10 Section 3.2.2.2.1 Section 3.2.3.2
NPPA Fish and Game Code Sections 1900 et seq.	The Native Plant Protection Act (NPPA) lists threatened, endangered, and rare plants listed by the State.	**Yes.** No threatened, endangered, or rare plants anticipated to occur. Preconstruction surveys and avoidance buffers provide further protection.	Section 3.2.1.9 Section 3.2.2.2.1 Section 3.2.5.2

Table 3.2-18. LORS Applicable to Biological Resources

LORS	Applicability		Conformity	Opt-In Application Reference
CDNPA Food and Agricultural Code Sections 80001 et seq.	The California Desert Native Plants Act (CDNPA) is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands.	**Yes.** The species listed in the CDNPA have been mapped, and the Project would seek the appropriate permit from the County of Los Angeles to collect those that will be impacted.	Section 3.2.1.9.1 Section 3.2.2.2.5 Section 3.2.5.2.4	
Fish and Wildlife Code Sections 1900 et seq.	Lists endangered or rare native plants of the State and establishes criteria for determining rarity or listing status.		**Yes.** No endangered or rare plants present. Preconstruction surveys and avoidance buffers prevent potential impacts to rare plant species.	Section 3.2.1.9 Section 3.2.2.2.1 Section 3.2.5.2
Title 14 CCR, Sections 670.2 and 670.5	Lists animals designated as threatened or endangered in California		**Yes.** State threatened and endangered plants and animals analyzed. Avoidance, minimization, and mitigation measures include preconstruction surveys, avoidance buffers, timing restrictions, and take authorization from the CEC/CDFW.	Section 3.2.1.10 Section 3.2.2.2.1 Section 3.2.5.2
CFG Code Sections 1601-1607	Prohibits alteration of any stream, including intermittent and seasonal channels and many artificial channels without a permit from CDFW.		**Yes.** Permit from CEC/CDFW will be in hand prior to impacts to CDFW jurisdictional features.	Section 3.2.1.8 Section 3.2.2.2.3 Section 3.2.5.2
CEQA Public Resources Code (PRC) Sections2100, et seq. and CEQA Guidelines (14 C.C.R. 15000, et seq.)	CEQA requires that the effects of a project on environmental resources must be analyzed and assessed using criteria determined by the lead agency.		**Yes.** Environmental resources analyzed using CEQA and CEC criteria.	Section 3.2.2.2 Section 3.2.5.2

Table 3.2-18. LORS Applicable to Biological Resources

LORS	Applicability	Conformity	Opt-In Application Reference
Warren Alquist Act Public Resources Code (PRC) 25000, et seq.	A CEQA-equivalent process implemented by the CEC.	**Yes.** Environmental resources analyzed using CEQA and CEC criteria.	Section 3.2.2.2 Section 3.2.5.2
California Assembly Bill 205	Emergency regulation expanding the CEC's siting authority for renewable energy projects. Allows certification in lieu of CDFW 2081 ITP or CFGC Section 1600 et seq. LSAA.	**Yes.** Take authorization, if necessary, and LSAA to be coordinated with CEC with input from CDFW.	Throughout the Opt-In Application
Local			
Los Angeles County 2035 General Plan	The Los Angeles County 2035 General Plan provides the policy framework for how and where the unincorporated County will grow through the year 2035, while recognizing and celebrating the County's wide diversity of cultures, abundant natural resources, and status as an international economic center.	**Yes.** The Project will mitigate impacts to biological resources, which will comply with the General Plan goals and policies related to open space.	Section 3.2.2.2 Section 3.2.5.3
Ord. 2019-0072 § 2, 2019 Significant Ecological Areas	The SEA Program was originally established as a part of the 1980 County General Plan, to help conserve the genetic and physical diversity within Los Angeles County by designating biological resource areas capable of sustaining themselves into the future. The General Plan 2035 updated the SEA boundary map, goals and policies in 2015.	**Yes**. The Project's Gen-Tie Line will impact SEA Resource Categories 1 through 3 in the form special-status plants and wildlife, water resources, and vegetation communities; however, all such impacts are mitigated in accordance with the SEA ordinance and CEQA guidelines.	Section 3.2.1.13 Section 3.2.2.2.5 Section 3.2.5.3

3.2.5.1 Federal LORS

3.2.5.1.1 Federal ESA (16 United States Code [USC] 153 et seq.)

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and to provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. The FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under the FESA, it is unlawful to "take" any listed species, and "take" is defined as, "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

The FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement.

Federally threatened and endangered plants and animals are analyzed herein. Avoidance, minimization, and mitigation measures will include preconstruction surveys, avoidance buffers, timing restrictions, and take authorization from the USFWS if necessary.

3.2.5.1.2 Migratory Bird Treaty Act (16 USC 703 to 711)

The Migratory Bird Treaty Act (16 USC 703 et seq.), as amended (MBTA), prohibits the intentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Project pre-construction surveys and avoidance buffers for active nests will prevent impacts to nesting migratory birds.

3.2.5.1.3 Bald and Golden Eagle Protection Act (16 USC 668)

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, includes their parts, nests, or eggs. The Act provides criminal penalties for person who "take, possess, sell, purchase, bater, offer to sell, transport, export or import, at any time or any manner, any bald eagle… [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, kill, wound, capture, trap, collect, molest or disturb."

Project pre-construction surveys and avoidance buffers will prevent take of eagles.

3.2.5.2 State LORS

3.2.5.2.1 California Endangered Species Act

CESA (California Fish and Game Code Sections 2050–2068) provides protection and prohibits take of plant, fish, and wildlife species listed by the State of California. Unlike the FESA, under the CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to the FESA and is prohibited for both listed and candidate species. Incidental Take authorization may be obtained by a project applicant from the California Department of Fish and Wildlife (CDFW) under CESA Section 2081, which also allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

State threatened and endangered plants and animals are analyzed herein. Avoidance, minimization, and mitigation measures include preconstruction surveys, avoidance buffers, timing restrictions, and Incidental Take authorization from the CEC/CDFW, if necessary.

3.2.5.2.2 Fish and Game Code

Sections 3500, 3511, and 3513

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

Project pre-construction surveys and avoidance buffers for active nests will prevent impacts to nesting migratory birds.

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

FP species are discussed herein. No take of FP species is anticipated.

Section 1600–1616

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of a definable bed and banks and existing fish or wildlife resources. CDFW takes

jurisdiction to the top of bank of the stream or the limit of the adjacent riparian vegetation, which may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high-water mark (OHWM) to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete, certified California Environmental Quality Act (CEQA) document. The CEC Stands in the shoes of CDFW in ensuring compliance with the substantive requirements of the Lake or Streambed Alteration Agreement program.

3.2.5.2.3 California Native Plant Protection Act

The Native Plant Protection Act of 1977 (see Section 1900 *et seq.* of the California Fish and Game Code) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare," and to protect endangered and rare plants from take. The CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, the CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the CESA as threatened species but did not do so for rare plants. Thus, there are three (3) listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in the CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the Project proponent.

No threatened, endangered, or rare plants are anticipated to occur. Preconstruction surveys and avoidance buffers will provide further protection.

3.2.5.2.4 California Desert Native Plant Act

The purpose of the California Desert Native Plants Act is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands. The California Desert Native Plants Act only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. Within these counties, the California Desert Native Plants Act prohibits the harvest, transport, sale, or possession of specific native desert plants unless a person has a valid permit or wood receipt and the required tags and seals. The appropriate permits, tags, and seals must be obtained from the County sheriff or commissioner of the County where collecting will occur, and the County will charge a fee. 3.2.5.2.5 Porter–Cologne Water Quality Control Act

Pursuant to provisions of the Porter–Cologne Water Quality Control Act (Porter–Cologne Act), the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code Section 13260[a]). The State Water Resources Control Board defines a water of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water

Code Section 13050[e]). As of April 2019, the State Water Resources Control Board has narrowed its definition of a water of the state to include the following (SWRCB 2021):

1. Natural wetlands
2. Wetlands created by modification of a surface water of the state
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration
    b. Specifically identified in a water quality control plan as a wetland or other water of the state
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape
    d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

All waters of the United States are waters of the state. Wetlands, such as isolated seasonal wetlands, that are not generally considered waters of the United States are considered waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2021). If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter–Cologne Act.

The Project is expected to be subject to Waste Discharge Requirements (WDRs) from RWQCB. Permits and mitigation plans required prior to construction will be the responsibility of the qualified biologist assigned by the Applicant.

As discussed in Section 3.15.2.3.1 within Section 3.15, Water Resources, the Project is unlikely to encounter shallow groundwater and dewatering is not expected to be required. However, should groundwater be encountered during construction, any dewatering activity that would discharge to the land surface would need to comply with the provisions of General WDRs and ensure compliance with the Basin Plan. If required, the applicant and/or its contractor will submit the following to the Los Angeles RWQCB: a Notice of Intent to comply with these General WDRs, a project map, a copy of the CEQA document, the requisite fee, a discharge monitoring plan, and any additional information requested by the Los Angeles RWQCB. Please refer to Section 3.15.2.3.1 for additional details.

Additionally, the project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. For

additional details regarding groundwater. Please refer to Section 3.15.2.3.2 within Section 3.15, Water Resources for additional details.

3.2.5.2.6 Plants and Animals of California Declared to be Endangered or Threatened (Title 14, CCR, Sections 670.2 and 670.5

These codes list plants and animals designated as threatened or endangered in California. State SSC is a category conferee by CDFW of those species that are indicators of regional habitat change or are considered potential future protected species. These species do not have any species legal status but are intended by CDFW for use as a management tool to take these species into special consideration when decisions are made concerning the future of any land parcel.

State threatened and endangered plants and animals are analyzed herein. Avoidance, minimization, and mitigation measures will include preconstruction surveys, avoidance buffers, timing restrictions, and take authorization from the CEC/CDFW, if necessary.

3.2.5.2.7 CEQA (PRC Sections 21000 et seq.)

CEQA requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the California Natural Diversity Database (CNDDB) is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under the FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List Species. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on the CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as California Rare Plant Rank 1 and 2 by the California Native Plant Society, and potentially some California Rare Plant Rank 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service."

Project environmental resources will be analyzed pursuant to CEQA.

3.2.5.2.8 Warren Alquist Act (PRC Sections 25000, et seq.)

The AFC process is a certified regulatory process pursuant to the Warren-Alquist Act and, therefore, fulfills the requirements of CEQA. CEQA is codified in the California PRC, Sections 21000, et seq. Guidelines for implementation of CEQA are codified in Title 14 of the California Code of Regulations (CRR), Sections 15000-15387.

Project environmental resources will be analyzed pursuant to CEQA.

3.2.5.2.9 California Energy Commission – Assembly Bill 205

Assembly Bill (AB) 205 is an emergency regulation expanding the CEC's siting authority for renewable energy projects constructed on or before June 30, 2029. AB 205 was signed into law on June 30, 2022, and allows renewable and energy storage projects to apply for direct state permits through the CEC. CEC certification opt-in statute (specifically 25545.1(b)(1)) says "the issuance of a certificate by the commission for a site and related facility pursuant to this chapter shall be in lieu of any permit, certificate, or similar document required by any state, local, or regional agency [except California Coastal Commission, San Francisco Bay Conservation and Development Commission, and State/Regional Water Quality Control Board] … for the use of the site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency…."

The application for certification process is in lieu of CDFW's Incidental Take Permit and Lake and Streambed Alteration Agreement processes. However, applications for both of these permits will be submitted to the CEC for informational purposes. The CEC Certification will include conditions and mitigation consistent with the Commission's AB 205 authorities.

Project take authorization, if necessary, and a LSAA will be administered by the CEC in consultation with CDFW. A completed 1602 Lake and Streambed Alteration Agreement application is included as Appendix 3.2K.

3.2.5.3 Local LORS

3.2.5.3.1 Los Angeles County General Plan

The General Plan includes guiding principles that inform the County's goals, policies, and implementation actions. The following goals and policies are relevant to the Project and applicable to biological resources (County of Los Angeles 2015):

Goal C/NR 1: Open space areas that meet the diverse needs of Los Angeles County.

> Policy C/NR 1.3: Support the acquisition of new available open space areas. Augment this strategy by leveraging County resources in concert with the compatible open space stewardship actions of other agencies, as feasible and appropriate.

Goal C/NR 2: Effective collaboration in open space resource preservation.

> Policy C/NR 2.2: Encourage the development of multi-benefit dedicated open spaces.
>
> Policy C/NR 3.8: Discourage development in areas with identified significant biological resources, such as Significant Ecological Areas (SEAs).

The Project will mitigate impacts to biological resources, which will comply with the General Plan goals and policies related to open space.

3.2.5.3.2 County of Los Angeles Significant Ecological Areas

SEAs are officially designated areas within the County with irreplaceable biological resources. The SEA program objective is to conserve genetic and physical diversity within the County by designating biological resource areas that can sustain themselves into the future. The SEA also protects native trees and provides a list of the protected species and the size of the diameter of the trunk that triggers protection. The SEA Ordinance establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights. A discretionary SEA Conditional Use Permit application is required for development that cannot demonstrate compliance with Section 22.102.070 (Protected Tree Permit), or Sections 22.102.090 (SEA Development Standards) and 22.102.100 (Natural Open Space Preservation) of the County Code. County Planning has issued the SEA Ordinance Implementation Guide (County Planning 2020) to help proposed development comply with the ordinance.

SEA Resource Categories

The SEA Ordinance includes SEA Resource Categories 1 through 5. These categories are defined as follows (County Planning 2020):

- **Category 1:** FESA and CESA listed plant and wildlife species; CESA candidate species, CRPR 1A or B, 2A or B, and 3 (CNPS 2025a), critically imperiled natural communities (those that have a Global [G] and/or State [S] ranking of 1 (NatureServe 2025), and water resources
- **Category 2:** CDFW SSC and their occupied habitat, and imperiled natural communities (those that have are G2/S2) (NatureServe 2025)
- **Category 3:** Vulnerable natural communities that are G3/S3 (NatureServe 2025), sensitive local native resources, and oak woodlands
- **Category 4:** Apparently secure natural communities that are G4/S4 (NatureServe 2025), secure natural communities that are G5/S5 (NatureServe 2025), and CRPR 4 species
- **Category 5:** All other lands including those dominated by non-native vegetation, agricultural fields, hedges, early successional vegetation that has yet to form into a distinct natural community, cleared or disturbed areas, and non-native trees and shrubs.

Table 3.2-19, Recommended Preservation Ratios for SEA CUP, lists the recommended preservation ratios for impacts to SEA Resources Categories for projects that require a Conditional Use Permit.

Table 3.2-19. Recommended Preservation Ratios for SEA CUP

SEA Resources	Preservation Ratio
Category 1 ▪ State or federally listed species and their habitats ▪ California Rare Plant Ranks 1,2,3 ▪ Natural communities ranked G1/S1	5:1

Table 3.2-19. Recommended Preservation Ratios for SEA CUP

SEA Resources	Preservation Ratio
▪ Water resources (e.g., wetlands, streams, ponds, lakes, vernal pools, marshes) ▪ Beach and dune	
Category 2 ▪ Natural communities ranked G2/S2 ▪ Species of Special Concern and their habitats	4:1
Category 3 ▪ Natural communities ranked G3/S3 ▪ Oak woodland ▪ Sensitive local native resources ▪ Rock outcrops/rocklands	3:1
Category 4 ▪ Natural communities ranked G4/S4/G5/S5 ▪ California Rare Plant Rank 4 ▪ Non-native grasslands	2:1
Category 5 ▪ Wildlife linkage or corridor or open space buffer	1:1

Source: County Planning 2020.
Notes: SEA = Significant Ecological Area; G = Global; S = State.

The Project's Gen-Tie Line will potentially impact SEA Resource Categories 1 through 3 in the form special-status plants and wildlife, water resources, and vegetation communities; however, all such impacts are mitigated in accordance with the SEA ordinance and CEQA.

SEA Protected Trees

The SEA Ordinance includes 60 tree species to be protected in addition to already protected oak trees (County Planning 2020). The SEA Protected Tree List specifies the species of tree protected in each individual SEA and the size of the tree when regulations are applied. A Protected Tree Permit from the County shall be required for development that complies with Section 22.102.090 (SEA Development Standards) except for Subsection 22.102.090.B (SEA Protected Trees) of the County Code, and which includes any of the following impacts:

1. Pruning or trimming of branches of SEA Protected Trees in excess of 2 inches in diameter or 25% of live foliage for one or more trees;
2. Encroachments of up to 30% into an SEA Protected Tree's protected zone; any encroachment of more than 30% into the protected zone of a tree shall be considered as a tree removal
3. Removal of up to two SEA Protected Trees that are not designated as heritage trees (single trunk that measures 36 inches or more in diameter, or two trunks that collectively measure 54 inches or more in diameter)
4. Tree relocation poses significant risk to the health or survival rate of a tree. Any relocation of an SEA Protected Tree shall, therefore, be processed as a removal

California juniper, velvet ash, and Southern California black walnut ~~is a~~ are protected trees under the SEA Ordinance. The Project will potentially impact ~~35~~ up to 53 California juniper due to the construction of the gen-tie,

up to 1 velvet ash, and up to 1 Southern California black walnut, however, all such impacts are mitigated in accordance with the SEA ordinance.

3.2.6 Permit and Permit Schedule

The Project is expected to require a Lake or Streambed Alteration Agreement from CDFW, but for the CEC's Opt-In Application for Certification process, and a WDR from RWQCB. Permits and mitigation plans required prior to construction will be the responsibility of the qualified biologist assigned by the Applicant. Lake or Streambed Alteration Agreement is included herein as Appendix 3.2K. It is expected that the WDR would be issued within 90 days after certification by the CEC of the environmental impact report for the Project.

Table 3.2-20, Biological Resource Permits, lists the permits related to biological resources.

Table 3.2-20. Biological Resource Permits

Permit	Agency	Status
Lake or Streambed Alteration Agreement (LSAA)	California Department of Fish and Wildlife – Region 5, South Coast	Submitted as part of this Opt-In application (see Appendix 3.2K)
Waste Discharge Requirements (WDR)	Los Angeles Regional Water Quality Control Board (RWQCB)	Application will be submitted to Los Angeles RWQCB in October 2025
California Desert Native Plants Act Permit	Los Angeles County	Will be obtained prior to collection of plants that will be impacted

3.2.7 Agency Contacts

Table 3.2-21, Summary of the Agency Contacts, lists regulatory agency contacts for biological resources for this project.

Table 3.2-21. Summary of the Agency Contacts

Natural Resource	Agency	Contact Information
Locally Sensitive Species	County of Los Angeles Regional Planning	Joseph Decruyenaere, Senior Biologist; jdecruyenaere@planning.lacounty.gov[1]

Note:
[1] This correspondence is included as Appendix 3.2L.

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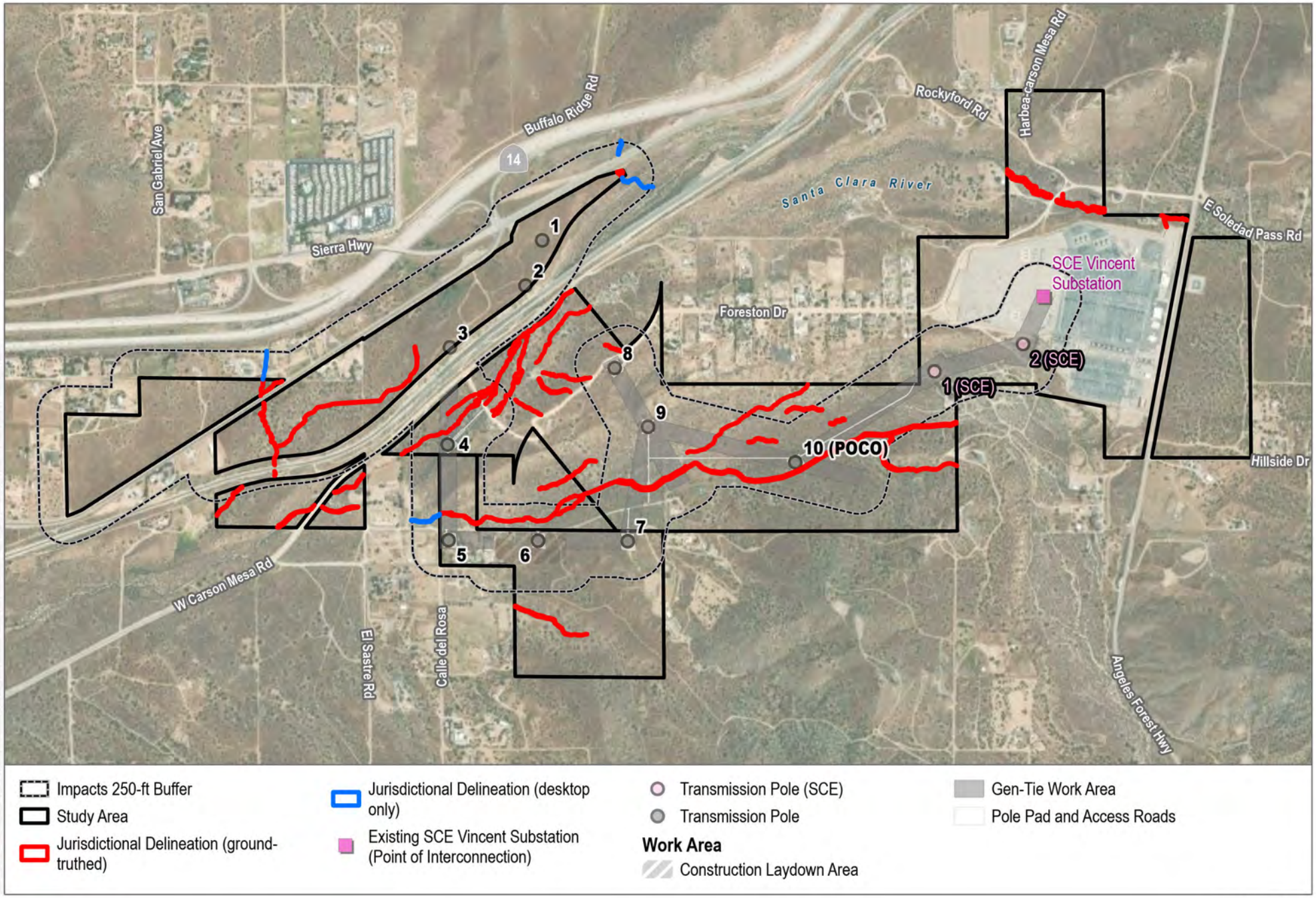

SOURCE: World Imagery

DUDEK

0 550 1,100 Feet

FIGURE 3.2-1

Hydrologic Features

Prairie Song Reliability Project

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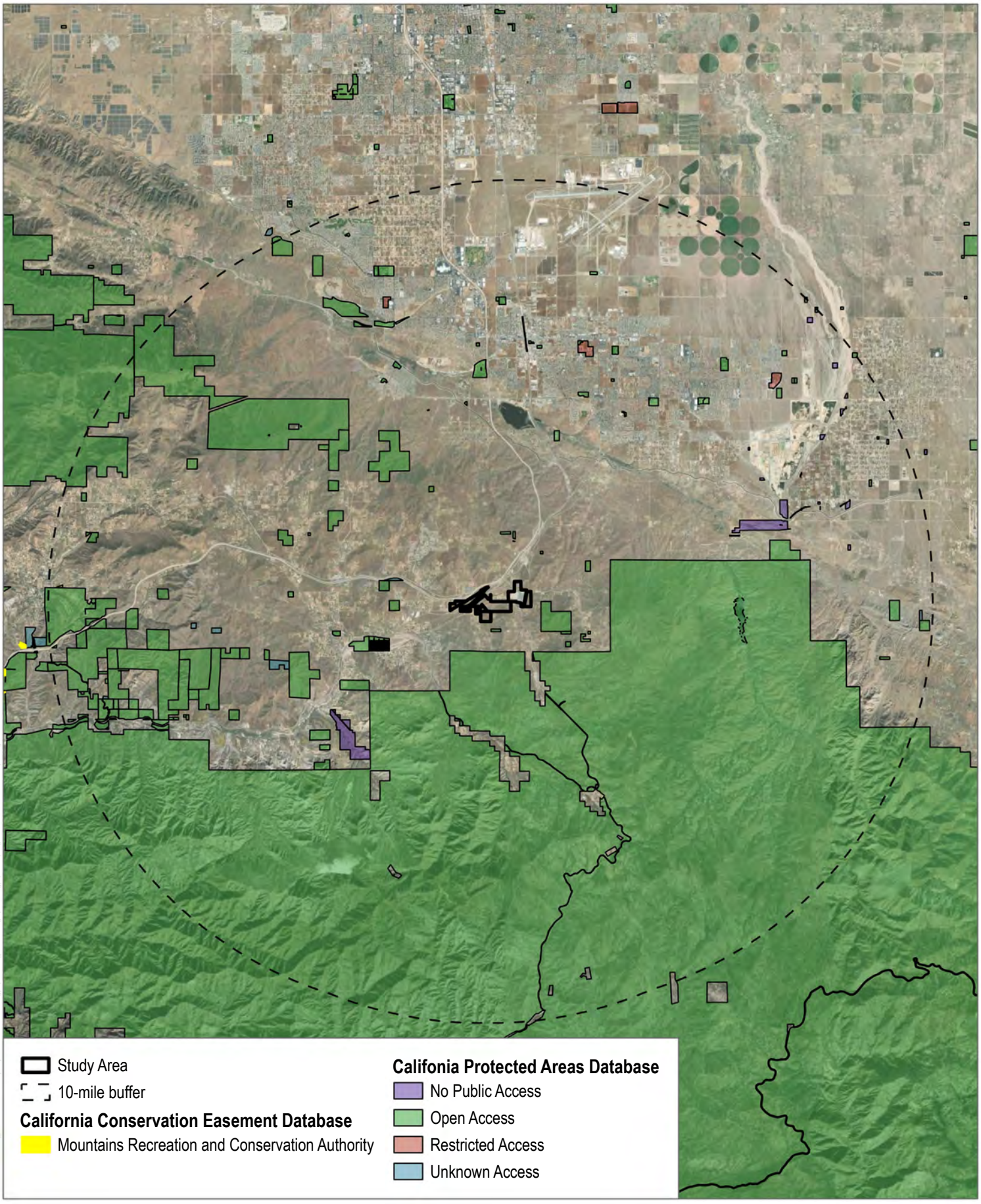

SOURCE: World Imagery; CPAD 2024; CCED 2024

DUDEK

0 8,000 16,000 Feet

FIGURE 3.2-2

Protected Areas

Prairie Song Reliability Project

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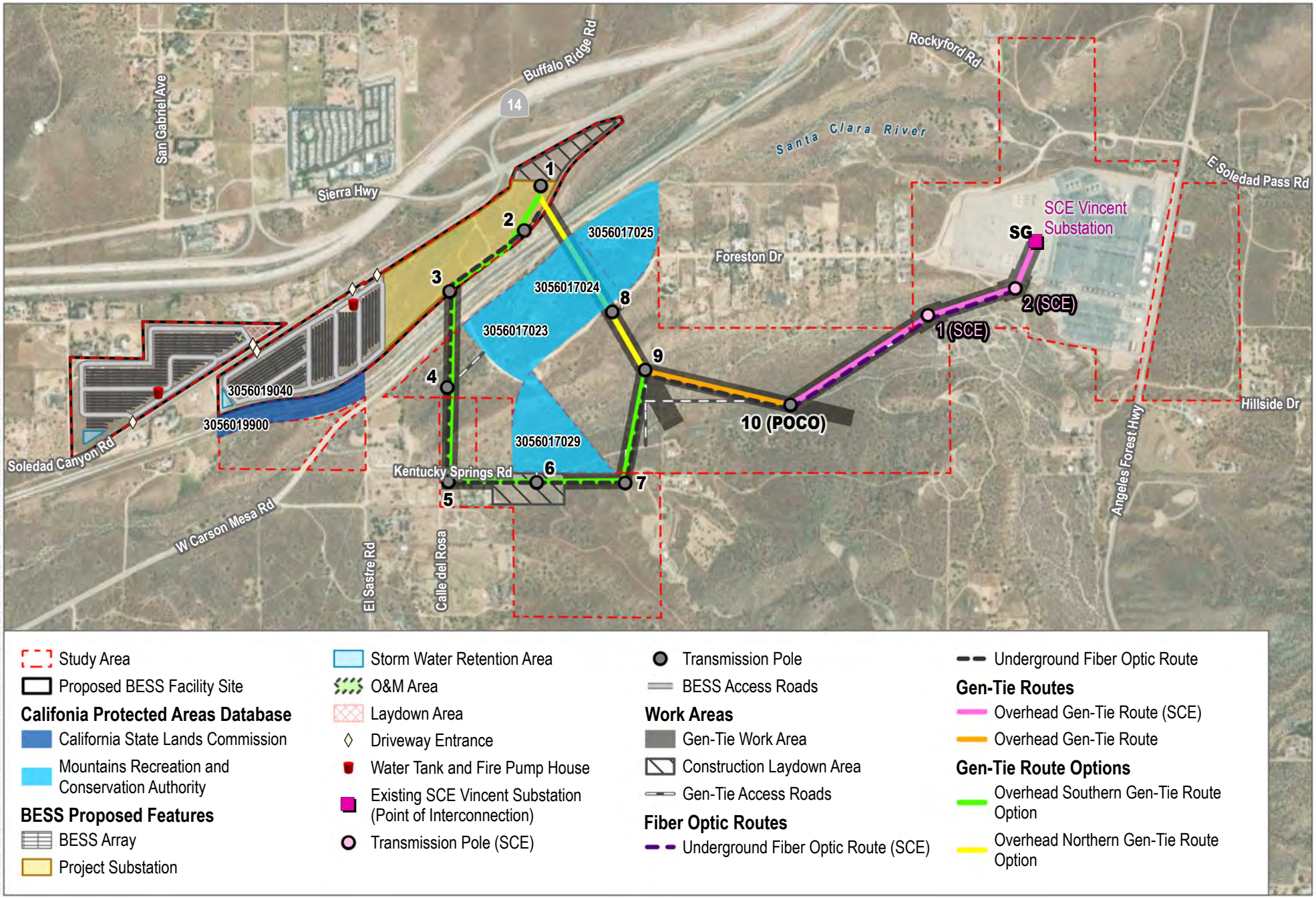

SOURCE: World Imagery; CPAD 2024

DUDEK

0 550 1,100 Feet

FIGURE 3.2-3

Local Protected Areas

Prairie Song Reliability Project

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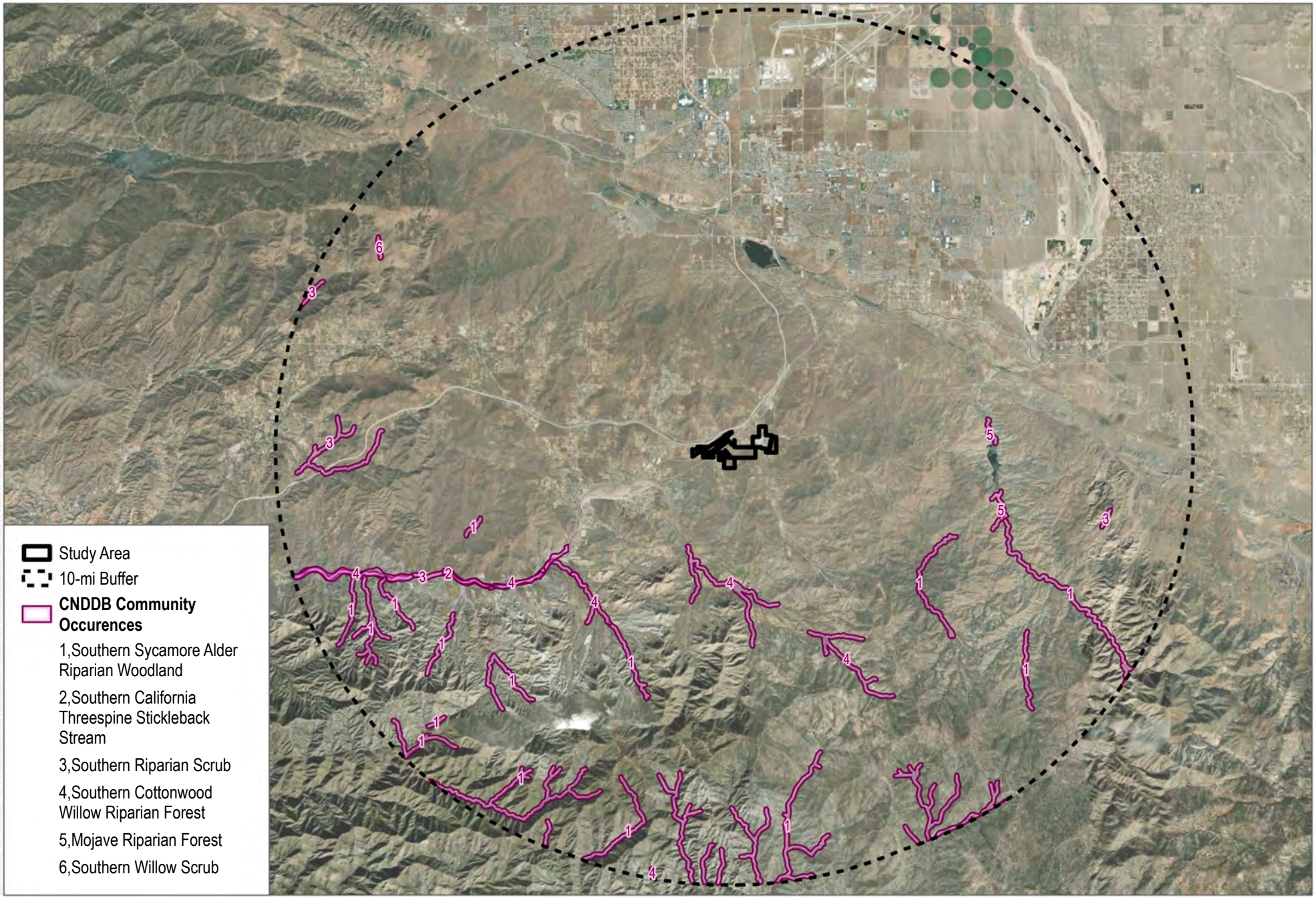

SOURCE: Bing Maps 2023; Open Street Map 2023; CA Dept. of Fish and Wildlife 2023

DUDEK

0 7,000 14,000 Feet

FIGURE 3.2-4

Sensitive Habitat Types

Prairie Song Reliability Project

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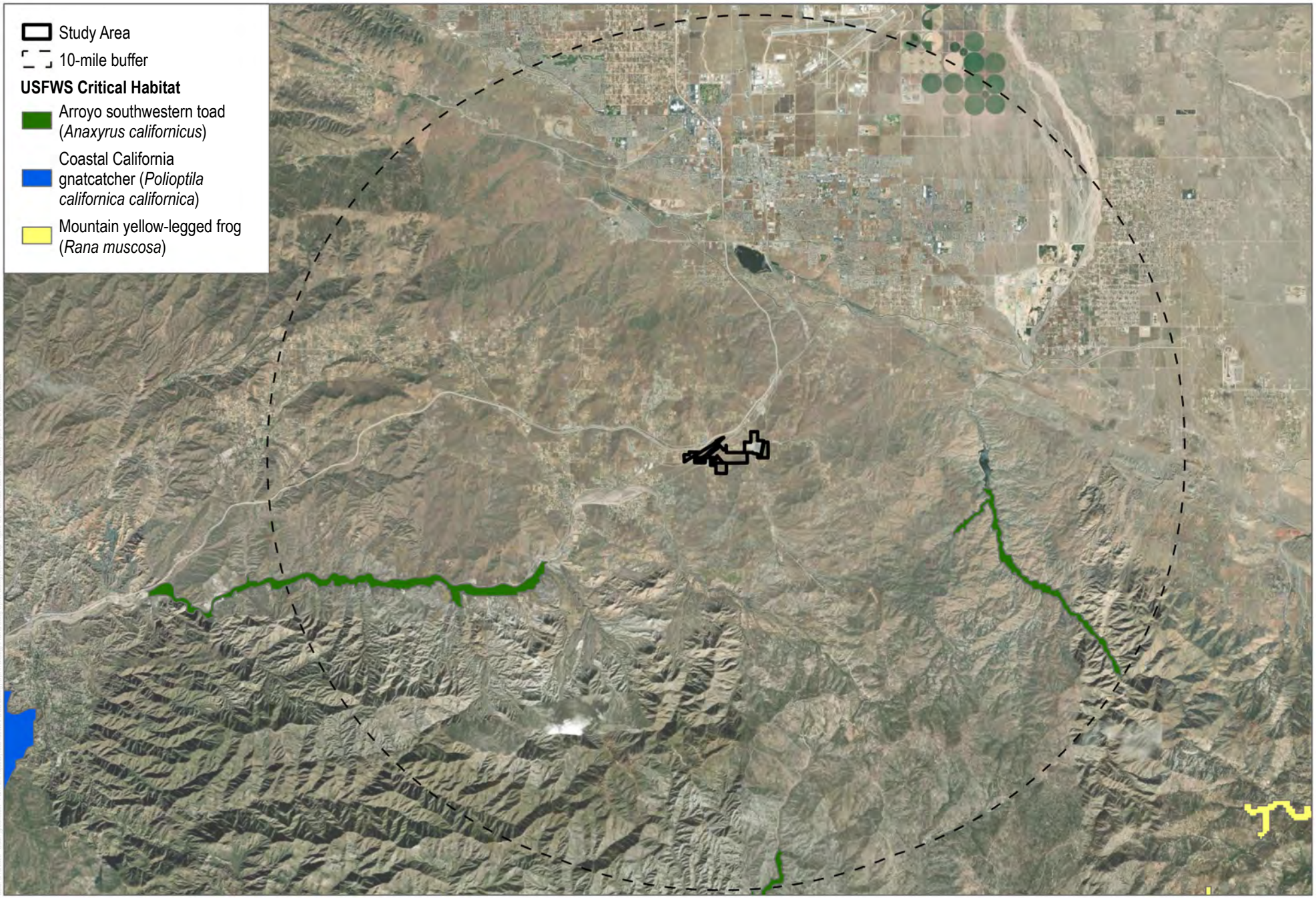

SOURCE: World Imagery; USFWS

DUDEK

0 8,000 16,000 Feet

FIGURE 3.2-5

Critical Habitat

Prairie Song Reliability Project

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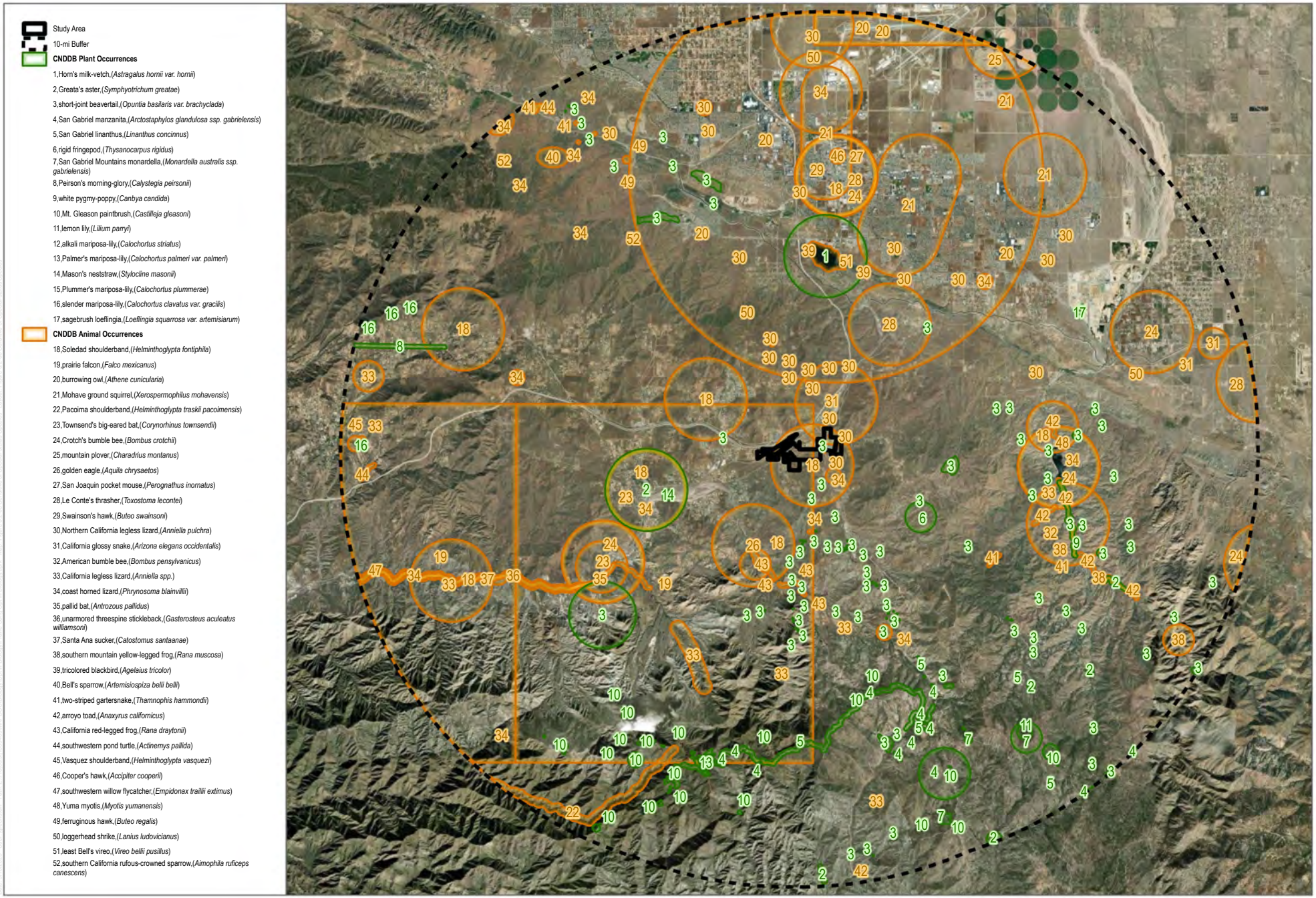

SOURCE: Bing Maps 2023; Open Street Map 2023; CA Dept. of Fish and Wildlife 2023

DUDEK

0 7,000 14,000 Feet

FIGURE 3.2-6b

Sensitive or Special-Status Species Records

Prairie Song Reliability Project

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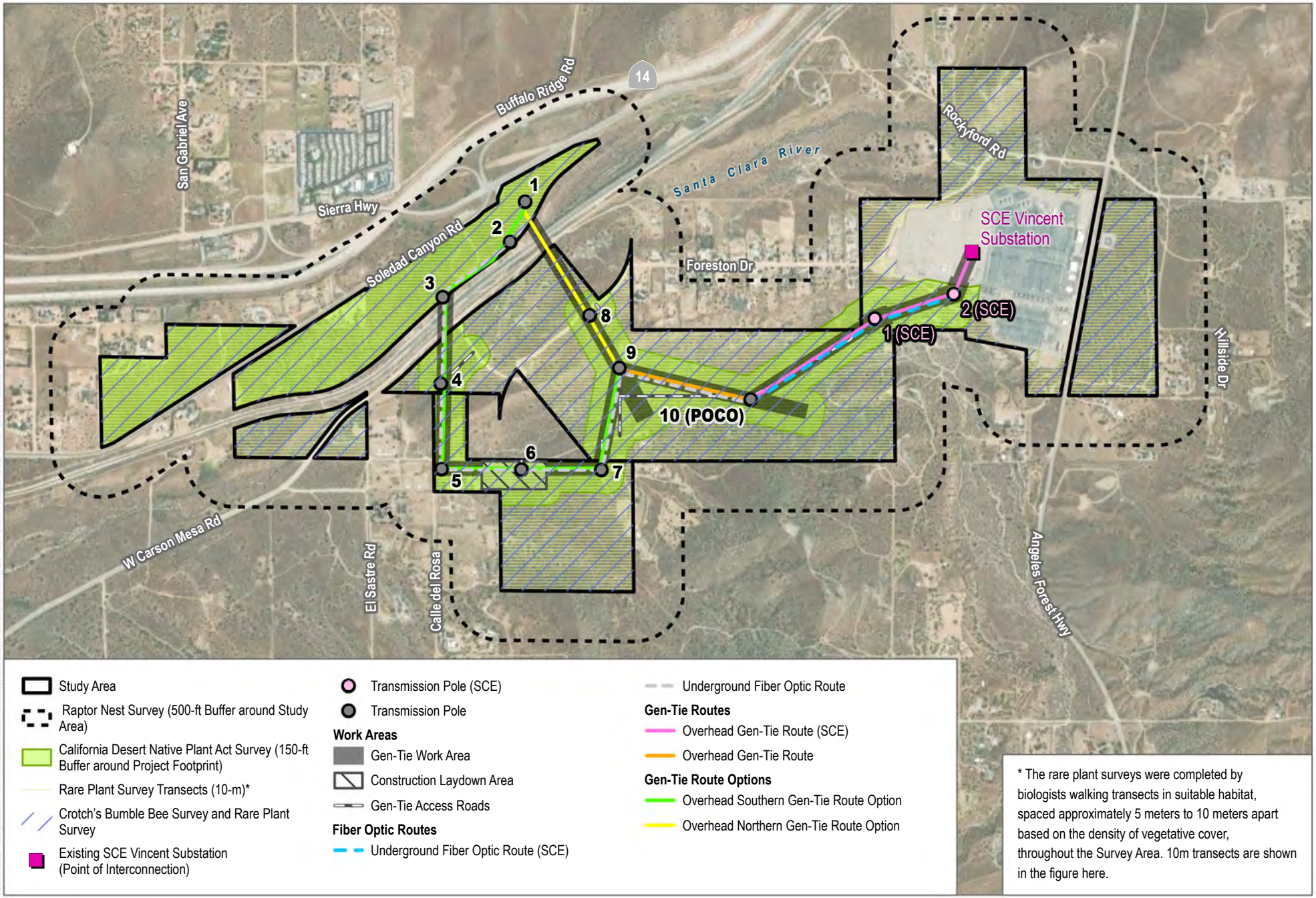

SOURCE: World Imagery

DUDEK

0 650 1,300 Feet

FIGURE 3.2-7

Biological Surveys

Prairie Song Reliability Project

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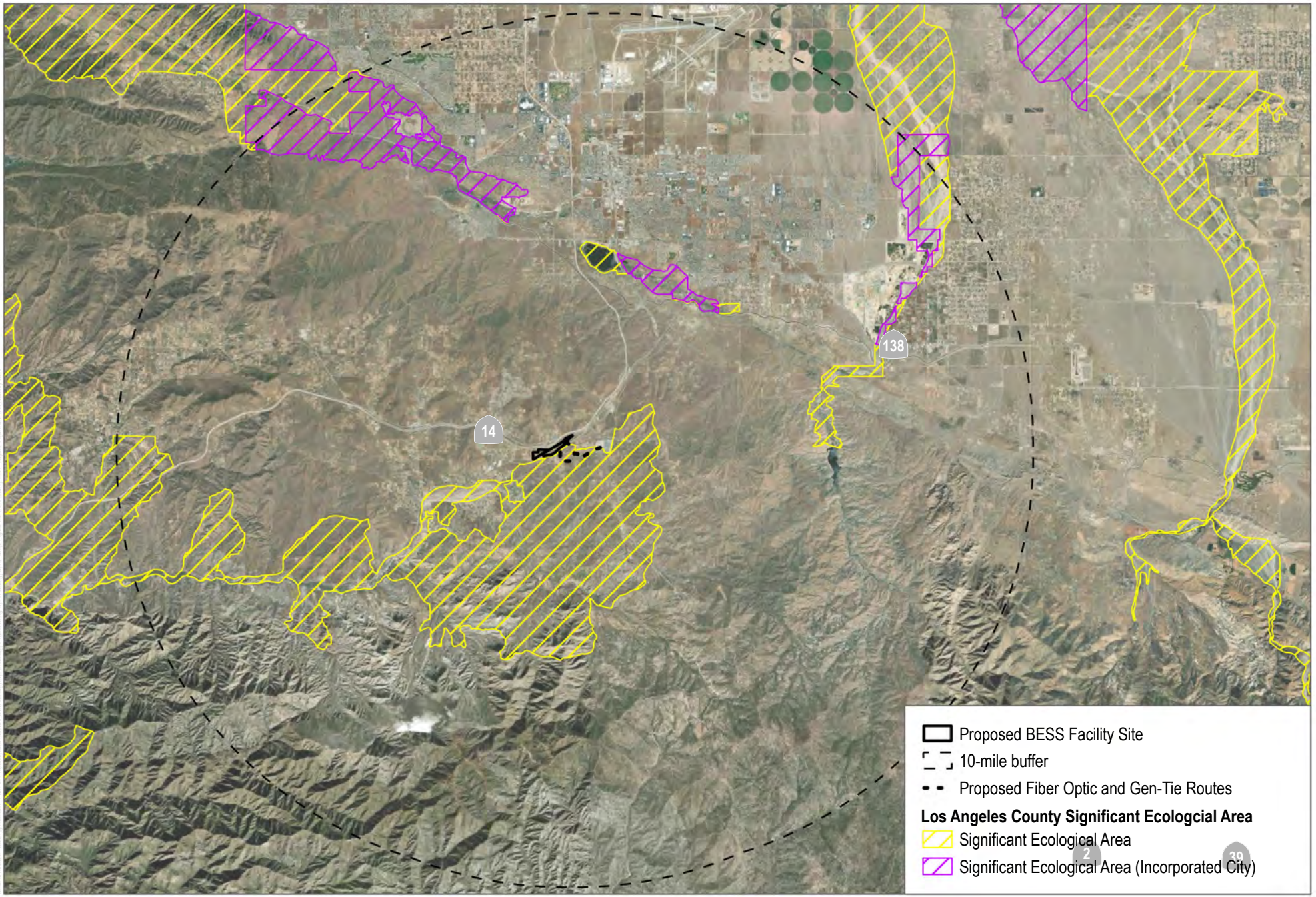

SOURCE: Los Angeles County; World Imagery

DUDEK

0 8,000 16,000 Feet

FIGURE 3.2-8

Los Angeles County Significant Ecological Area

Prairie Song Reliability Project

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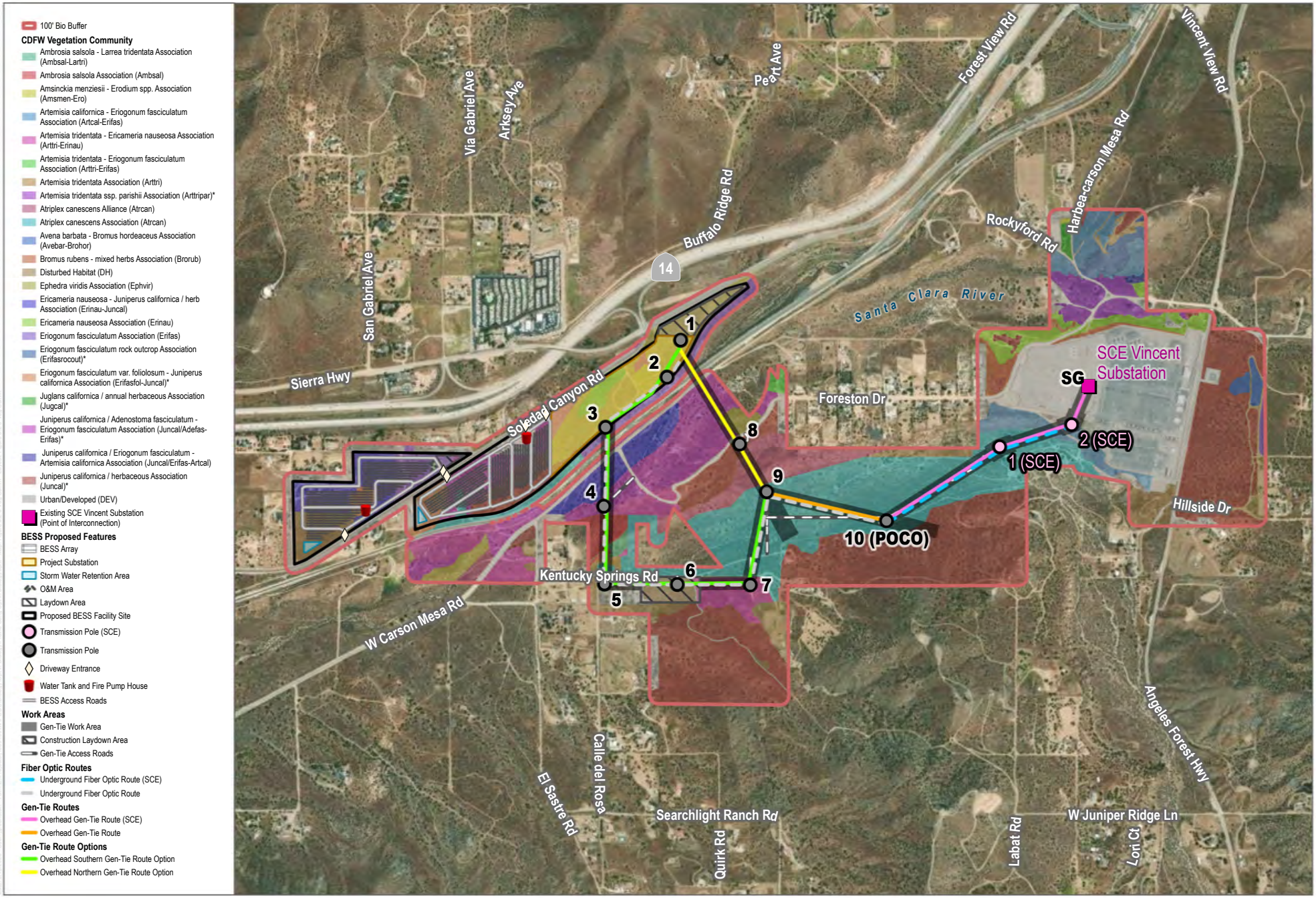

SOURCE: World Imagery

DUDEK

0 700 1,400 Feet

FIGURE 3.2-9

Vegetation Communities and Land Cover

Prairie Song Reliability Project

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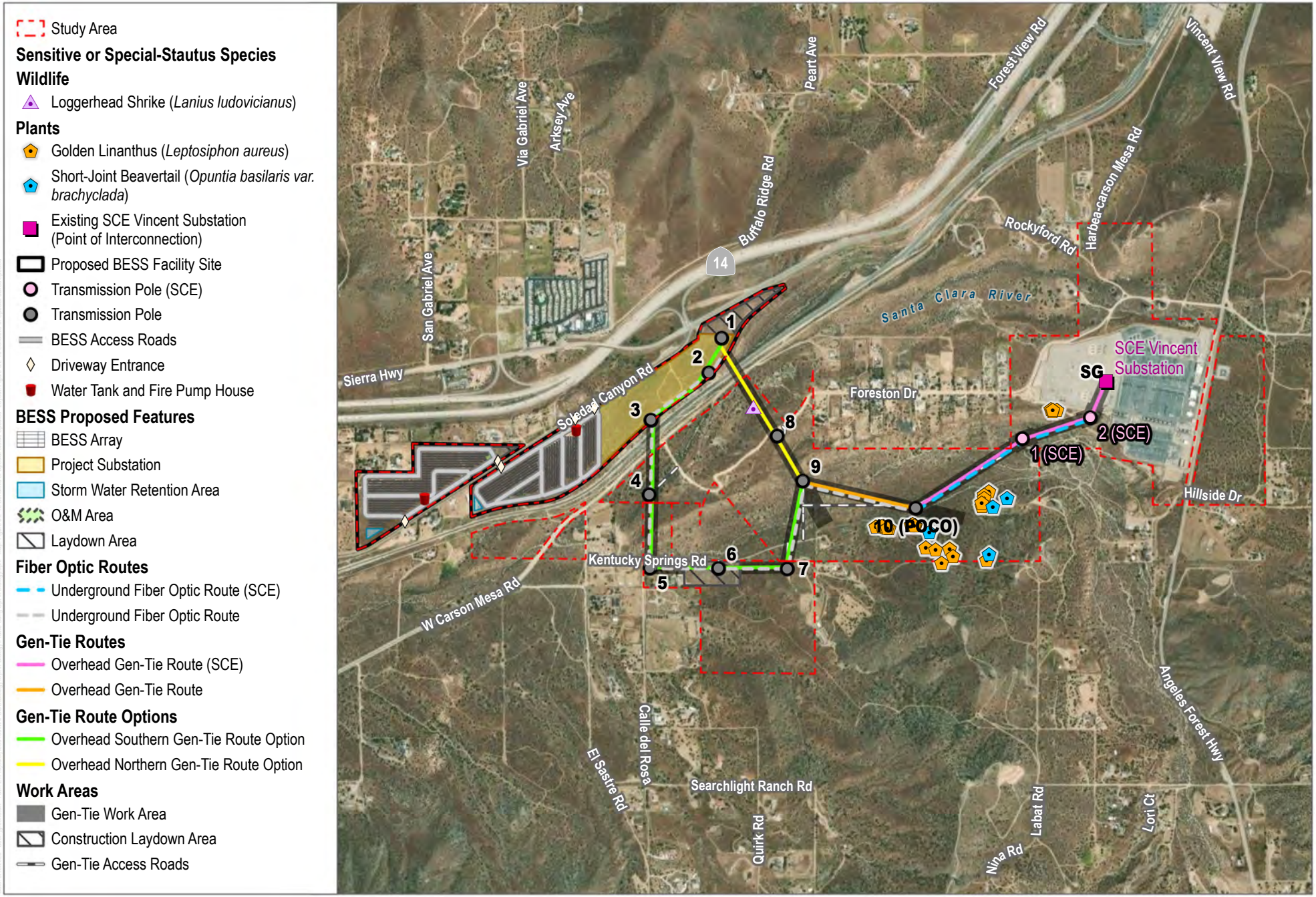

SOURCE: World Imagery

DUDEK

0 750 1,500 Feet

FIGURE 3.2-10

Sensitive or Special-Status Species Survey Results

Prairie Song Reliability Project

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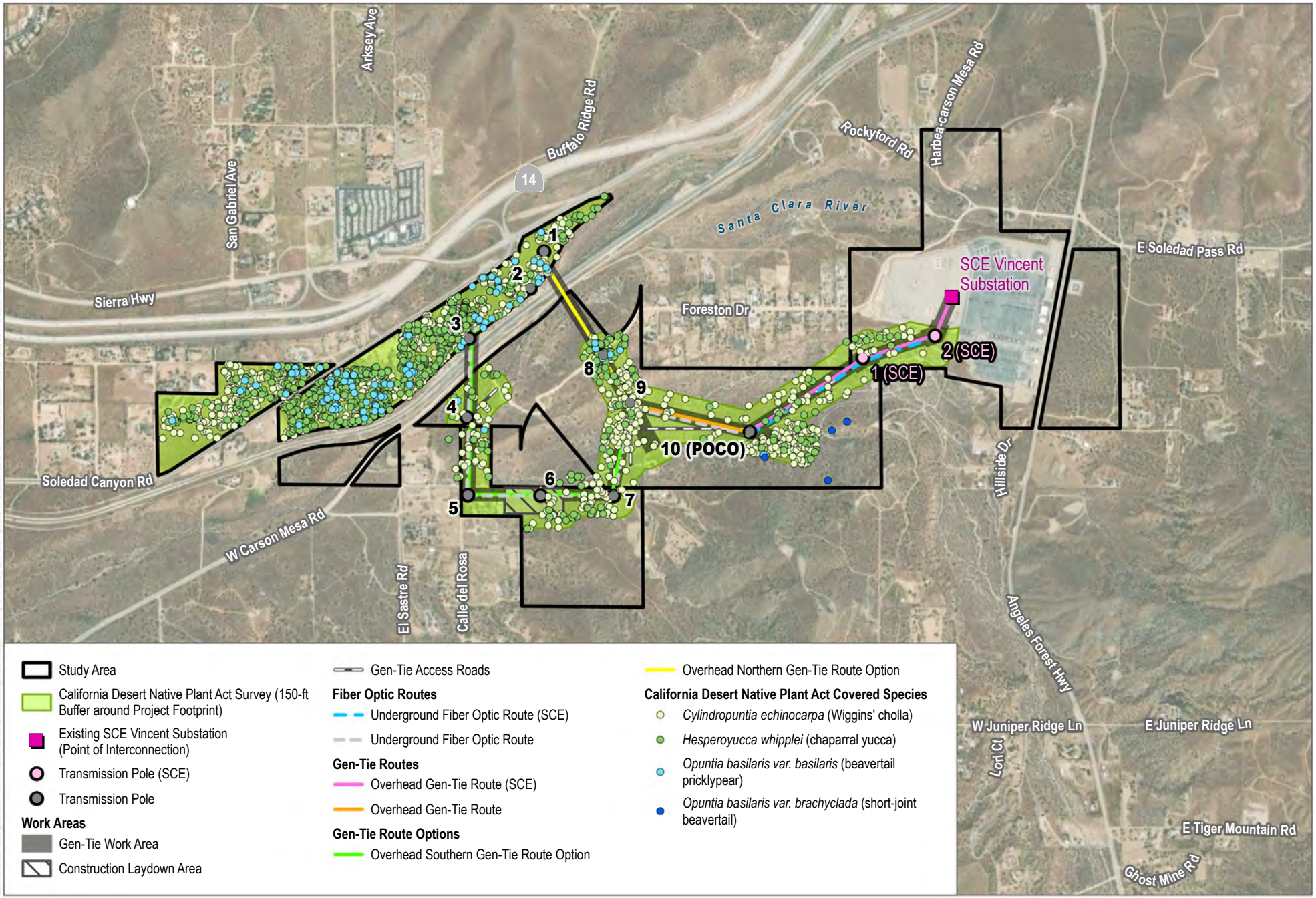

SOURCE: World Imagery

DUDEK

0 700 1,400 Feet

FIGURE 3.2-11

CA Desert Native Plant Act Covered Species

Prairie Song Reliability Project

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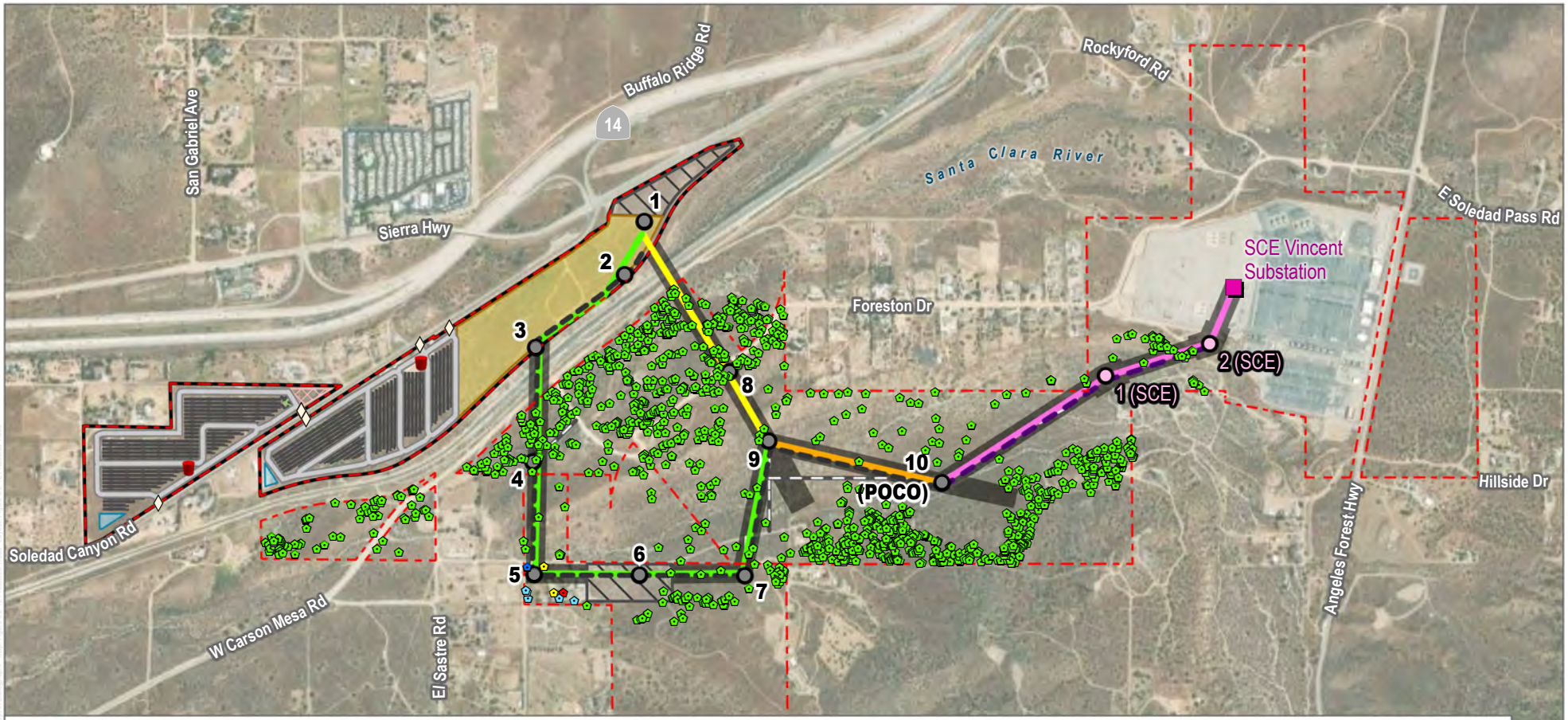

SOURCE: World Imagery

DUDEK

0 550 1,100 Feet

FIGURE 3.2-12

Protected Trees

Prairie Song Reliability Project

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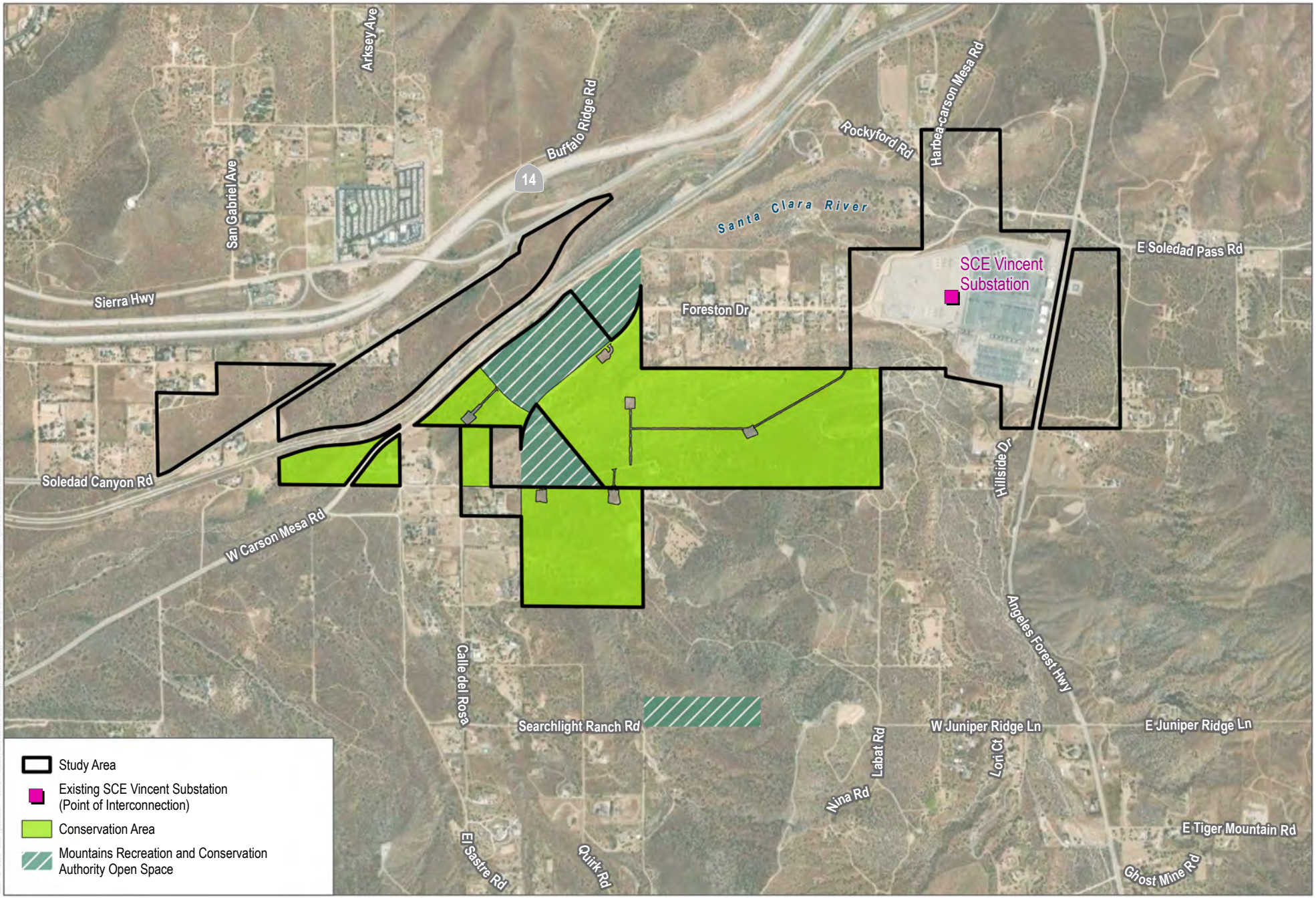

SOURCE: World Imagery; CPAD 2024

DUDEK

0 700 1,400 Feet

FIGURE 3.2-13

Conservation Area

Prairie Song Reliability Project

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Appendix 3.2B

Potential to Occur Table and Compendia – Redline

Potential to Occur Tables

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the California Environmental Quality Act Guidelines (CEQA) (14 CCR 15000 et seq.) are referred to as "special-status plant species" and, as used in this document, include (1) plant species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act[1] (FESA); and/or (2) plant species with a California Rare Plant Rank as designated by the California Native Plant Society[2].

Endangered, rare, or threatened wildlife species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR Section 15380(b)), are referred to as "special-status wildlife species" and, as used in this document, include (1) wildlife species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of CESA and FESA[3]; (2) California Species of Special Concern as designated by the California Department of Fish and Wildlife[4]; and (3) mammals and birds that are fully protected species as described in the California Fish and Game Code, Sections 4700 and 3511[5].

The potential for special-status plant species to occur within the Study Area was assessed based on known geographic and elevation ranges as well as habitat and soil conditions that are known to support species occurring in the region. Potential for special-status wildlife species to occur within the Study Area was assessed based on known geographic ranges, the presence/absence of suitable habitat, and other natural history elements that might predict their occurrence. After completion of the reconnaissance surveys, the potential for special-status plant and wildlife species to occur on or near the Project site was summarized according to the following categories. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided:

- Known to occur: the species has been documented on the property by a reliable source.
- High potential to occur: the species has not been documented on the property but is known to recently occur in the vicinity and suitable habitat is present.
- Moderate potential to occur: the species has not been documented on the property or in the vicinity, but the site is within the known range of the species and suitable habitat for the species is present.
- Low potential to occur: the species has not been documented in the vicinity or on the property, but the site is within the known range of the species; however, suitable habitat for the species on site is of low quality.
    - A low potential to occur is also given to species that have suitable habitat present and the site is within the geographic and elevation range of the species, but the species was not observed during surveys that were conducted during the species' blooming period.
- Not expected to occur: the property is outside the known geographic or elevational range of the species and/or the site does not support suitable habitat for the species.

1 CDFW. 2025. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Accessed April 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.
2 CNPS. 2025. Inventory of Rare and Endangered Plants (online edition, v8-03). Accessed April 2025. www.rareplants.cnps.org.
3 CDFW. 2025. State and Federally Listed Endangered and Threatened Animals of California. Accessed April 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline.
4 CDFW. 2025. Species of Special Concern. Accessed April 2025. https://www.wildlife.ca.gov/Conservation/SSC.
5 CDFW. 2025h. Fully Protected Animals. Accessed April 2025. https://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html.

Special-Status Plants

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Acanthoscyphus parishii var. *abramsii*	Abrams' oxytheca	None/None/1B.2	Chaparral/annual herb/June–Aug/ 3,750–6,745	Not expected to occur. The Study Area is outside this species current range.
Androsace elongata ssp. *acuta*	California androsace	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland/annual herb/ Mar–June/490–4,280	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Anomobryum julaceum	slender silver moss	None/None/4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; Roadsides (usually)/ moss/N.A./330–3,280	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Aphyllon validum ssp. *validum*	Rock Creek broomrape	None/None/1B.2	Chaparral, Pinyon and juniper woodland; Granitic/perennial herb (parasitic)/ May–Sep/3,380–6,560	Not expected to occur. Suitable micro-habitat (granitic) for the species is not present in the Study Area.
Arctostaphylos glandulosa ssp. *gabrielensis*	San Gabriel manzanita	None/None/1B.2	Chaparral/perennial evergreen shrub/ Mar/1,950–4,920	Not expected to occur. This conspicuous species was not observed in the Study Area.
Arctostaphylos parryana ssp. *tumescens*	interior manzanita	None/None/4.3	Chaparral (montane), Cismontane woodland/perennial evergreen shrub/ Feb–Apr/6,890–7,580	Not expected to occur. This conspicuous species was not observed in the Study Area.
Asplenium vespertinum	western spleenwort	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub; Rocky/perennial rhizomatous herb/Feb–June/ 590–3,280	Low potential to occur. Suitable habitat for the species is present in the Study Area, but records for the species are from the southern and eastern San Gabriel Mountains.
Astragalus hornii var. *hornii*	Horn's milk-vetch	None/None/1B.1	Meadows and seeps, Playas; Alkaline, Lake Margins/annual herb/May–Oct/ 195–2,785	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/ perennial evergreen shrub/ (Feb)Mar–June/230–2,705	Not expected to occur. This conspicuous species was not observed in the Study Area.
Calochortus clavatus var. *clavatus*	club-haired mariposa lily	None/None/4.3	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Clay, Rocky, Serpentine (usually)/perennial bulbiferous herb/ (Mar)May–June/100–4,265	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus clavatus var. *gracilis*	slender mariposa-lily	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland/perennial bulbiferous herb/Mar–June (Nov)/1,045–3,280	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus palmeri var. *palmeri*	Palmer's mariposa-lily	None/None/1B.2	Chaparral, Lower montane coniferous forest, Meadows and seeps; Mesic/ perennial bulbiferous herb/Apr–July/ 2,325–7,840	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Calochortus plummerae	Plummer's mariposa-lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland; Granitic, Rocky/perennial bulbiferous herb/May–July/330–5,580	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus striatus	alkali mariposa-lily	None/None/1B.2	Chaparral, Chenopod scrub, Meadows and seeps, Mojavean desert scrub; Alkaline, Mesic/perennial bulbiferous herb/Apr–June/230–5,230	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Calystegia peirsonii	Peirson's morning-glory	None/None/4.2	Chaparral, Chenopod scrub, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland/perennial rhizomatous herb/ Apr–June/100–4,920	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Canbya candida	white pygmy-poppy	None/None/4.2	Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland; Granitic, Gravelly, Sandy/ annual herb/ Mar–June/1,970–4,790	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Castilleja gleasoni	Mt. Gleason paintbrush	None/SR/1B.2	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; Granitic/perennial herb (hemiparasitic)/ May–June (Sep)/3,805–7,115	Not expected to occur. Suitable habitat for the species is present in the Study Area but the Study Area is outside the range of the species.
Castilleja plagiotoma	Mojave paintbrush	None/None/4.3	Great Basin scrub (alluvial), Joshua tree "woodland", Lower montane coniferous forest, Pinyon and juniper woodland/ perennial herb (hemiparasitic)/ Apr–June/985–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1B.1	Marshes and swamps, Valley and foothill grassland, Vernal pools/annual herb/ May–Nov/0–1,570	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	None/SE/1B.1	Coastal scrub, Valley and foothill grassland/annual herb/Apr–July/ 490–4,000	Not expected to occur. Marginal habitat is present in the Study Area; however, no recent records along the SR-14.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Chorizanthe spinosa	Mojave spineflower	None/None/4.2	Chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, Playas; Alkaline (sometimes)/annual herb/Mar–July/ 20–4,265	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Claytonia peirsonii ssp. *peirsonii*	Peirson's spring beauty	None/None/1B.2	Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Metamorphic, Scree, Talus/perennial herb/(Mar) May–June/4,955–9,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Clinopodium mimuloides	monkey-flower savory	None/None/4.2	Chaparral, North Coast coniferous forest; Mesic, Streambanks/perennial herb/ June–Oct/1,000–5,905	Not expected to occur. Suitable micro-habitats (mesic and streambanks) for the species are not present in the Study Area.
Diplacus johnstonii	Johnston's monkeyflower	None/None/4.3	Lower montane coniferous forest (disturbed areas, gravelly, roadsides, rocky, scree)/annual herb/May–Aug/ 3,200–9,580	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub; Flood deposited terraces and washes/annual herb/Apr–June/ 655–2,490	Not expected to occur. Suitable micro-habitats (Flood deposited terraces and washes) for the species are not present in the Study Area.
Erigeron breweri var. *jacinteus*	San Jacinto Mountains daisy	None/None/4.3	Subalpine coniferous forest, Upper montane coniferous forest; Rocky/ perennial rhizomatous herb/June–Sep/ 8,860–9,515	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Eriogonum umbellatum var. *minus*	alpine sulfur-flowered buckwheat	None/None/4.3	Subalpine coniferous forest, Upper montane coniferous forest; Gravelly/ perennial herb/June–Sep/ 5,905–10,065	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Erythranthe diffusa	Palomar monkeyflower	None/None/4.3	Chaparral, Lower montane coniferous forest; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–June/ 4,005–6,005	Not expected to occur. The Study Area is below the elevation range of the species.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Frasera neglecta	pine green-gentian	None/None/4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest/perennial herb/ May–July/4,595–8,205	Not expected to occur. The Study Area is below the elevation range of the species.
Galium angustifolium ssp. *gabrielense*	San Antonio Canyon bedstraw	None/None/4.3	Chaparral, Lower montane coniferous forest; Granitic, Rocky (sometimes), Sandy (sometimes)/perennial herb/ Apr–Aug/3,935–8,695	Not expected to occur. The Study Area is below the elevation range of the species.
Galium angustifolium ssp. *gracillimum*	slender bedstraw	None/None/4.2	Joshua tree "woodland", Sonoran desert scrub; Granitic, Rocky/perennial herb/ Apr–June (July)/425–5,085	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Galium jepsonii	Jepson's bedstraw	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Granitic, Gravelly (sometimes), Rocky (sometimes)/perennial rhizomatous herb/July–Aug/5,055–8,205	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Galium johnstonii	Johnston's bedstraw	None/None/4.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Riparian woodland/perennial herb/ June–July/4,005–7,545	Not expected to occur. The Study Area is below the elevation range of the species.
Goodmania luteola	golden goodmania	None/None/4.2	Meadows and seeps, Mojavean desert scrub, Playas, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/annual herb/Apr–Aug/ 65–7,220	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Heuchera abramsii	Abrams' alumroot	None/None/4.3	Upper montane coniferous forest (rocky)/perennial rhizomatous herb/ July–Aug/9,185–11,485	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Heuchera caespitosa	urn-flowered alumroot	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Riparian forest (montane), Upper montane coniferous forest; Rocky/perennial rhizomatous herb/May–Aug/3,790–8,695	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Horkelia cuneata var. *puberula*	mesa horkelia	None/None/1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/ perennial herb/Feb–July (Sep)/ 230–2,660	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Hulsea vestita ssp. *gabrielensis*	San Gabriel Mountains sunflower	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Rocky/ perennial herb/May–July/ 4,920–8,205	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Hulsea vestita ssp. *parryi*	Parry's sunflower	None/None/4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; Carbonate (sometimes), Granitic (sometimes), Openings, Rocky/perennial herb/ Apr–Aug/4,495–9,500	Not expected to occur. The Study Area is below the elevation range of the species.
Imperata brevifolia	California satintail	None/None/2B.1	Chaparral, Coastal scrub, Meadows and seeps, Mojavean desert scrub, Riparian scrub; Mesic/perennial rhizomatous herb/Sep–May/0–3,985	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Juglans californica	Southern California black walnut	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous tree/Mar–Aug/ 165–2,955	Not expected to occur. This conspicuous species was not observed in the Study Area.
Juncus duranii	Duran's rush	None/None/4.3	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest; Mesic/perennial rhizomatous herb/July–Aug/ 5,800–9,200	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lepechinia fragrans	fragrant pitcher sage	None/None/4.2	Chaparral/perennial shrub/Mar–Oct/ 65–4,300	Not expected to occur. This conspicuous species was not observed in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3	Chaparral, Coastal scrub/annual herb/ Jan–July/5–2,905	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Leptosiphon aureus	Golden linanthus	None/None/4.2	Chaparral, Cismontane woodland, Valley and foothill grassland/annual herb/ Apr—May/5-2,300	Present. Numerous observations of the species were mapped within the gen-tie portion of the Study Area
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland; Openings/ perennial bulbiferous herb/ Mar–July (Aug)/100–5,905	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Lilium parryi	lemon lily	None/None/1B.2	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; Mesic/perennial bulbiferous herb/ July–Aug/4,000–9,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Linanthus concinnus	San Gabriel linanthus	None/None/1B.2	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest; Openings, Rocky/annual herb/Apr–July/ 4,985–9,185	Not expected to occur. The Study Area is below the elevation range of the species.
Loeflingia squarrosa var. *artemisiarum*	sagebrush loeflingia	None/None/2B.2	Desert dunes, Great Basin scrub, Sonoran desert scrub; Sandy/annual herb/Apr–May/2,295–5,295	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lupinus albifrons var. *johnstonii*	interior bush lupine	None/None/4.3	Chaparral, Lower montane coniferous forest; Decomposed granitic/perennial shrub/May–July/4,920–8,205	Not expected to occur. The Study Area is below the elevation range of the species.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Lupinus elatus	silky lupine	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest/ perennial herb/June–Aug/4,920–9,845	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lupinus peirsonii	Peirson's lupine	None/None/1B.3	Joshua tree "woodland", Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; Gravelly, Rocky/ perennial herb/Apr–June/3,280–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Lycium torreyi	Torrey's box-thorn	None/None/4.2	Mojavean desert scrub, Sonoran desert scrub; Rocky, Sandy, Streambanks, Washes/perennial shrub/(Jan–Feb)Mar–June (Sep–Nov)/-165–4,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Malacothamnus davidsonii	Davidson's bush-mallow	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous shrub/June–Jan/ 605–3,740	Not expected to occur. This conspicuous species was not observed in the Study Area.
Monardella australis ssp. *gabrielensis*	San Gabriel Mountains monardella	None/None/1B.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest; Granitic, Openings/shrub/July–Sep/ 5,245–7,215	Not expected to occur. The Study Area is below the elevation range of the species.
Monardella australis ssp. *gabrielensis*	San Gabriel Mountains monardella	None/None/1B.2	Broadleafed upland forest, Chaparral (montane), Lower montane coniferous forest; Granitic, Openings/shrub/ July–Sep/5,250–7,220	Not expected to occur. The Study Area is below the elevation range of the species.
Monardella exilis	Mojave monardella	None/None/4.2	Chenopod scrub, Desert dunes, Great Basin scrub, Joshua tree "woodland", Lower montane coniferous forest, Mojavean desert scrub, Pinyon and juniper woodland; Sandy/annual herb/ Apr–Sep/1,970–6,725	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Monardella viridis	green monardella	None/None/4.3	Broadleafed upland forest, Chaparral, Cismontane woodland/perennial rhizomatous herb/June–Sep/ 330–3,315	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Mucronea californica	California spineflower	None/None/4.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland; Sandy/annual herb/ Mar–July (Aug)/0–4,595	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Muhlenbergia californica	California muhly	None/None/4.3	Chaparral, Coastal scrub, Lower montane coniferous forest, Meadows and seeps; Mesic, Seeps, Streambanks/perennial rhizomatous herb/June–Sep/330–6,560	Not expected to occur. Suitable micro-habitats (mesic, seeps, and streambanks) for the species are not present in the Study Area.
Muilla coronata	crowned muilla	None/None/4.2	Chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland/perennial bulbiferous herb/Mar–Apr (May)/ 2,200–6,430	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/ 100–2,150	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Nemacladus secundiflorus var. *robbinsii*	Robbins' nemacladus	None/None/1B.2	Chaparral, Valley and foothill grassland; Openings/annual herb/Apr–June/ 1,150–5,580	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Opuntia basilaris var. *brachyclada*	short-joint beavertail	None/None/1B.2	Chaparral, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland/perennial stem/ Apr–June (Aug)/1,390–5,905	Present. Four individuals were identified in the gen-tie portion of the Study Area during the 2023 focused rare plant surveys.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/ 50–2,165	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Oreonana vestita	woolly mountain-parsley	None/None/1B.3	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest; Gravelly (sometimes), Talus (sometimes)/ perennial herb/Mar–Sep/5,300–11,485	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Packera ionophylla	Tehachapi ragwort	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial herb/ June–July/4,920–8,860	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Perideridia pringlei	adobe yampah	None/None/4.3	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland; Clay (often), Serpentine/ perennial herb/Apr–June (July)/ 985–5,905	Not expected to occur. Suitable micro-habitats (clay and serpentine soils) for the species are not present in the Study Area.
Phacelia mohavensis	Mojave phacelia	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/ annual herb/Apr–Aug/4,595–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	Chaparral, cismontane woodland, Coastal scrub, Riparian woodland; gravelly benches, dry stream bottoms, Sandy/perennial herb/ (July) Aug–Nov (Dec)/0–6,885	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Quercus durata var. *gabrielensis*	San Gabriel oak	None/None/4.2	Chaparral, Cismontane woodland/ perennial evergreen shrub/Apr–May/ 1,475–3,280	Not expected to occur. This conspicuous species was not observed in the Study Area.
Quercus engelmannii	Engelmann oak	None/None/4.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland/perennial deciduous tree/ Mar–June/165–4,265	Not expected to occur. This conspicuous species was not observed in the Study Area.
Selaginella asprella	bluish spike-moss	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial rhizomatous herb/July/5,250–8,860	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Senecio astephanus	San Gabriel ragwort	None/None/4.3	Chaparral, Coastal scrub; Rocky, Slopes/ perennial herb/May–July/ 1,310–4,920	Not expected to occur. The Study Area is outside the range of the species.
Sidotheca caryophylloides	chickweed oxytheca	None/None/4.3	Lower montane coniferous forest (sandy)/annual herb/July–Sep (Oct)/ 3,655–8,530	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Stylocline masonii	Mason's neststraw	None/None/1B.1	Chenopod scrub, Pinyon and juniper woodland; Sandy/annual herb/ Mar–May/330–3,935	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Symphyotrichum greatae	Greata's aster	None/None/1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland; Mesic/perennial rhizomatous herb/ June–Oct/985–6,590	Not expected to occur. Suitable micro-habitat (mesic conditions) for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Syntrichopappus lemmonii	Lemmon's syntrichopappus	None/None/4.3	Chaparral, Joshua tree "woodland", Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/ annual herb/Apr–May (June)/1,640–6,005	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Thysanocarpus rigidus	rigid fringepod	None/None/1B.2	Pinyon and juniper woodland; Dry, Rocky, Slopes/annual herb/Feb–May/ 1,965–7,215	Not expected to occur. Herbarium records for the species are only from San Diego and Riverside counties.
Yucca brevifolia	western Joshua tree	None/SC/CBR	Great Basin grassland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland, Sonoran desert scrub, Valley and foothill grassland/perennial leaf succulent/ Apr–May/1,310–6,560	Not expected to occur. This conspicuous species was not observed in the Study Area.

Status Legend
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
State
SC: State candidate for listing
SE: State listed as endangered
SR: State designated as rare
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California but more common elsewhere
4: Plants of limited distribution
CBR: Considered by Rejected for a CRPR
Threat Rank
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% of 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)

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Special-Status Wildlife

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/CSL	Open grassland and scrub communities supporting suitable floral resources	Moderate potential to occur. The species may nest and forage in the Study Area; however, 2024 focused surveys for the species conducted in the Study Area were negative for the species.
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	Not expected to occur (overwintering). Suitable habitat for the species is not present in the Study Area; however, the species may be transient through the area during migration.
Euphydryas editha quino	quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex)	Not expected to occur. The Study Area is outside the current range of the species.
Glyptostoma gabrielense	San Gabriel chestnut	None/None	Native to a narrow strip of the front range of the San Gabriel Mountains about 15 miles (24 km) long near Pasadena, California, where it inhabits riparian canyons and other areas with sufficient seasonal moisture	Not expected to occur. The Study Area is outside the current range of the species.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Helminthoglypta fontiphila	Soledad shoulderband	None/None	known only from Little Rock Creek Canyon on the north flank of the San Gabriel Mountains and from the Santa Clara River in Soledad Canyon	Not expected to occur. The Study Area is outside the current range of the species.
Helminthoglypta traskii pacoimensis	Pacoima shoulderband	None/None	Known only from Pacoima Canyon on the west slope of the San Gabriel Mountains	Not expected to occur. The Study Area is outside the current range of the species.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Fish				
Catostomus santaanae	Santa Ana sucker	FT/None	Small, shallow, cool, clear streams less than 7 meters (23 feet) in width and a few centimeters to more than a meter (1.5 inches to more than 3 feet) in depth; substrates are generally coarse gravel, rubble, and boulder	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	FE/FP, SE	Slow-moving and backwater areas	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rhinichthys gabrielino	Santa Ana speckled dace	None/SSC	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Amphibians				
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana boylii pop. 6	foothill yellow-legged frog - south coast DPS	FE/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana muscosa	mountain yellow-legged frog	FE/SE	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Taricha torosa (Monterey Co. south only)	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Reptiles				
Actinemys pallida	southwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Anniella pulchra/ Anniella stebbinsi/ Anniella spp.	northern California legless lizard/ southern California legless lizard/ California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Moderate potential to occur. Suitable habitat is present throughout the Study Area and there are recent records in the region; however, moist sandy or loose, loamy soils are limited in the Study Area to beneath the larger California junipers due to the expected higher moisture content of the soil.
Arizona elegans occidentalis	California glossy snake	None/SSC	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils	Low potential to occur. Suitable habitat is present throughout the Study Area.
Aspidoscelis tigris stejnegeri	Coastal whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	Low potential to occur. Suitable habitat is present throughout the Study Area; however, the Study Area is in the northern limits of the species.
Diadophis punctatus modestus	San Bernardino ring-necked snake	None/None	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed-conifer forest, and woodland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gopherus agassizii	Mojave desert tortoise	FT/ST	Arid and semi-arid habitats in Mojave and Sonoran Deserts, including sandy or gravelly locations along riverbanks, washes, sandy dunes, canyon bottoms, desert oases, rocky hillsides, creosote flats, and hillsides	Not expected to occur. Suitable habitat for the species is not present in the Study Area, which is also outside the range of the species.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Moderate potential to occur. Suitable habitat is present throughout the Study Area and there are recent nearby records.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	Not expected to occur (nesting). Suitable habitat for the species is not present in the Study Area.
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Moderate potential to occur. Suitable habitat is present throughout the Study Area.
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to nest in the Study Area. Low potential for wintering and as a transient during foraging and migration. There is a 1965 record for nesting by the species to the south of the Study Area in Aliso Canyon.
Artemisiospiza belli belli	Bell's sage sparrow	None/WL	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Moderate potential to occur. Suitable habitat is present throughout the Study Area.
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/CSL	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur in the Study Area. The Study Area is outside of the predicted habitat for the species (CDFW 2024b) and no diagnostic sign of the species was observed during the many surveys of the Study Area

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Buteo regalis (wintering)	ferruginous hawk	None/WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	Low potential to occur. Marginal wintering habitat is present in the Study Area but local wintering records of the species are from the Antelope Valley, north of the Study Area.
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur for nesting in the Study Area but may occur as a transient during migration.
Charadrius (*Anarhynchus*) *montanus* (wintering)	mountain plover	BCC/SSC	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Falco mexicanus (nesting)	prairie falcon	None/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Geococcyx californianus	greater roadrunner	None/None	Include areas dominated by creosote, mesquite, chaparral, and tamarisk, as well as grasslands, riparian woodlands and canyons; nest sites are 3 to 10 feet or more off the ground, on a horizontal branch or in the crotch of a sturdy bush, cactus, or small tree	Occurs. The species was observed in the Study Area during the surveys and nesting habitat is found in the California juniper woodland. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Gymnogyps californianus	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees (*Sequoiadendron giganteus*); forages in relatively open habitats where large animal carcasses can be detected	Not expected to occur for nesting. Suitable nesting habitat for the species is not present in the Study Area. The species could be a transient in the area for foraging.
Icterus parisorum	Scott's oriole (breeding)	None/None	Breeding in Los Angeles County is concentrated in a few tracts of extensive Joshua tree woodland in the eastern Antelope Valley and patches of pinyon-juniper woodland on the north flank of the San Gabriel Mountains	Low potential to occur. While the Study Area does have juniper woodland, breeding records of the species in the region are from the desert slope of the San Gabriel Mountains (eBird 2025). The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Lanius ludovicianus (nesting)	loggerhead shrike	BCC/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Present. An individual was observed in 2023, suitable habitat for the species is present in the Study Area, and there are recent local records.
Pooecetes gramineus	vesper sparrow	None/None	Breeds in the northern United States and Canada and in the West in mountain meadows, grassy mesas, and sagebrush steppe up to 9,800 feet; winters in open grasslands and sparse shrublands in the valley and desert regions of Los Angeles County.	Low potential to occur. The species could occur during the winter season but it is not expected to nest. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Sturnella neglecta	western meadowlark	None/None	Commonly be found in agricultural land and other open habitats in the Antelope Valley	Low potential to occur. The Study Area lacks breeding habitat for the species but it could forage on site. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Toxostoma lecontei	LeConte's thrasher	BCC/SSC	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Low potential to occur for roosting and may forage over the Study Area. Suitable roosting habitat (trees) for the species is present in the Study Area.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None/None	Desert wash, desert scrub, desert succulent scrub, and pinyon–juniper woodland	Not expected to occur. In Los Angeles County, records of the species are from the eastern desert foothills of the San Gabriel Mountains.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/None	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Low potential to occur. Suitable habitat is present throughout the Study Area; however, the Study Area is in the northern limits of the species.
Ovis canadensis nelsoni	Nelson's bighorn sheep	None/FP	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Myotis thysanodes	fringed myotis	None/None	Drier woodlands (oak, pinyon–juniper, and ponderosa pine), desert scrub, mesic coniferous forest, grassland, and sage–grass steppe; sea level to 9,350 ft; roosts in buildings, mines, rocks, cliff faces, bridges, and large, decadent trees and snags	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Myotis volans	long-legged myotis	None/None	Primarily coniferous forests, but also seasonally in riparian and desert habitats; roosts in crevices in cliffs, caves, mines, buildings, exfoliating tree bark, and snags	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Myotis yumanensis	Yuma myotis	None/None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Neotamias speciosus speciosus	lodgepole chipmunk	None/None	Lodgepole pine forests	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Ovis canadensis nelsoni	Nelson's bighorn sheep	None/FP	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Perognathus inornatus	San Joaquin pocket mouse	None/None	Open grassland and scrub areas on fine-textured soils	Not expected to occur. In Los Angeles County, records of the species are from the foothills of the Liebre Mountains.
Puma concolor (Southern California/Central Coast Evolutionarily Significant Unit)	mountain lion	None/CSL	Require large areas of relatively undisturbed habitats with adequate connectivity; these often consist of pine forests, riparian and oak woodlands, streams, chaparral, and grasslands, though they are also known to occur in desert habitats	High potential to occur. The Study Area is part of large areas of relatively undisturbed habitats with adequate connectivity so it is expected that the species could use the Study Area as part of a home range. State Route 14 may reduce connectivity between the San Gabriel and Sierra Pelona mountains but not prohibit it. The species is not expected to have natal dens in the Study Area since females typically avoid establishing a den near human activity (Center for Biological Diversity and the Mountain Lion Foundation 2019)
Taxidea taxus	American badger	None/SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils; needs sufficient food, friable soils and open, uncultivated ground; preys on burrowing rodents and digs burrows	Low potential to occur. Suitable habitat is present in the Study Area but no individuals were observed and no diagnostic sign (i.e., burrows or digs with the species' conspicuous claw marks) were observed during the extensive surveys. There is one record within 20 miles of the Study Area from 1930 at Lake Los Angeles (CDFW 2025). There is one 2021 iNaturalist record approximately 8.6 miles to the west near Agua Dulce (iNaturalist 2025).

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Xerospermophilus mohavensis	Mohave ground squirrel	None/ST	Desert scrub habitats including those dominated by creosote bush and burrobush, desert sink scrub, and desert saltbush scrub	Not expected to occur. Suitable habitat for the species is not present in the Study Area and it is outside the range of the species.

[1] **Status Legend**
Federal
BCC: Bird of Conservation Concern (U.S. Fish and Wildlife Service)
FC: Candidate for federal listing as threatened or endangered
FE: Federally listed as endangered
FT: Federally listed as threatened
State
FP: California Fully Protected Species
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened
CSL: Candidate for State Listing
WL: CDFW Watch List Species

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Plant and Wildlife Compendia

The following compendia documents the plant and wildlife species that were observed during the surveys for the Project.

Plants

Gymnosperms and Gnetophytes

CUPRESSACEAE—CYPRESS FAMILY

Juniperus californica—California juniper

EPHEDRACEAE—EPHEDRA FAMILY

Ephedra californica—California joint fir

Ephedra viridis—Mormon tea

Eudicots

ADOXACEAE—MUSKROOT FAMILY

Sambucus nigra ssp. *caerulea*—blue elderberry

APIACEAE—CARROT FAMILY

Lomatium mohavense—Mojave desertparsley

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia acanthicarpa—flatspine bur ragweed

Ambrosia salsola var. *salsola*—burrobrush

Artemisia ludoviciana—white sagebrush

Artemisia tridentata ssp. *parishii*—big sagebrush

Artemisia tridentata ssp. *tridentata*—basin big sagebrush

Artemisia tridentata—big sagebrush

Chaenactis artemisiifolia—white pincushion

Chaenactis fremontii—pincushion flower

Chaenactis glabriuscula—yellow pincushion

Corethrogyne filaginifolia—sand-aster

Encelia actoni—Acton's brittle brush

Encelia farinosa—brittle bush

Encelia frutescens—button brittlebush

Ericameria brachylepis—chaparral goldenbush

Ericameria linearifolia—narrowleaf goldenbush

Ericameria nauseosa var. *hololeuca*—rubber rabbitbrush

Ericameria pinifolia—pinebush
Eriophyllum confertiflorum var. *confertiflorum*—golden-yarrow
Eriophyllum pringlei—Pringle's woolly sunflower
Gutierrezia californica—California match weed
Lasthenia glaberrima—smooth goldfields
Lasthenia gracilis—needle goldfields
Layia glandulosa—whitedaisy tidytips
Layia platyglossa—coastal tidytips
Malacothrix glabrata—smooth desertdandelion
Matricaria discoidea—disc mayweed
Senecio flaccidus—threadleaf ragwort
Stephanomeria pauciflora—brownplume wirelettuce
Tetradymia stenolepis—Mojave cottonthorn
Uropappus lindleyi—Lindley's silverpuffs

BORAGINACEAE—BORAGE FAMILY

Amsinckia douglasiana—Douglas' fiddleneck
Amsinckia menziesii—Menzies' fiddleneck
Cryptantha angustifolia—Panamint cryptantha
Cryptantha intermedia—Clearwater cryptantha
Harpagonella palmeri—Palmer's grapplinghook
Nemophila menziesii—baby blue eyes
Phacelia crenulata var. *ambigua*—purplestem phacelia
Phacelia distans—distant phacelia
Phacelia fremontii—Fremont's phacelia
Phacelia tanacetifolia—lacy phacelia
Pholistoma membranaceum—white fiestaflower

BRASSICACEAE—MUSTARD FAMILY

* *Hirschfeldia incana*—shortpod mustard
* *Sisymbrium altissimum*—tall tumblemustard

CACTACEAE—CACTUS FAMILY

Cylindropuntia echinocarpa—Wiggins' cholla
Opuntia basilaris var. *basilaris*—beavertail pricklypear
Opuntia basilaris var. *brachyclada*—short-joint beavertail
Opuntia littoralis—coast prickly pear

CHENOPODIACEAE—GOOSEFOOT FAMILY

Atriplex argentea—silverscale saltbush
Atriplex canescens—fourwing saltbush

Chenopodium californicum—California goosefoot
Grayia spinosa—spiny hop sage

CUCURBITACEAE—GOURD FAMILY

Marah macrocarpa—Cucamonga manroot

EUPHORBIACEAE—SPURGE FAMILY

Euphorbia albomarginata—whitemargin sandmat

FABACEAE—LEGUME FAMILY

Acmispon glaber—deer weed
Acmispon maritimus var. *maritimus*—coastal bird's-foot trefoil
Acmispon parviflorus—desert deervetch
Lupinus bicolor—miniature lupine

GERANIACEAE—GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill

LAMIACEAE—MINT FAMILY

Salvia apiana—white sage
Salvia carduacea—thistle sage
Salvia *columbariae*—chia
Salvia dorrii var. *pilosa*—purple sage
Scutellaria mexicana—Mexican bladdersage

LOASACEAE—LOASA FAMILY

Mentzelia ravenii—no common name

MONTIACEAE—MONTIA FAMILY

Calyptridium monandrum—common pussypaws

NYCTAGINACEAE—FOUR O'CLOCK FAMILY

Mirabilis laevis var. *crassifolia*—California four o'clock

ONAGRACEAE—EVENING PRIMROSE FAMILY

Camissonia contorta—plains evening primrose
Eulobus californicus—California suncup
* *Oenothera biennis*—common evening primrose

OROBANCHACEAE—BROOM-RAPE FAMILY

Castilleja exserta ssp. *exserta*—exserted Indian paintbrush

PAPAVERACEAE—POPPY FAMILY

Eschscholzia californica—California poppy
Eschscholzia minutiflora—pygmy poppy
Platystemon californicus—creamcups

PLANTAGINACEAE—PLANTAIN FAMILY

Penstemon spectabilis—showy penstemon

POLEMONIACEAE—PHLOX FAMILY

Eriastrum densifolium—giant woollystar

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum fasciculatum—California buckwheat
Rumex hymenosepalus—canaigre dock

RANUNCULACEAE—BUTTERCUP FAMILY

Delphinium parishii—desert larkspur

SOLANACEAE—NIGHTSHADE FAMILY

Lycium cooperi—peach thorn

Monocots

AGAVACEAE—AGAVE FAMILY

* *Agave americana*—American century plant
Hesperoyucca whipplei—chaparral yucca

POACEAE—GRASS FAMILY

* *Avena fatua*—wild oat
Bromus carinatus—California brome
* *Bromus diandrus*—ripgut brome
* *Bromus hordeaceus*—soft brome
* *Bromus madritensis* ssp. *rubens*—red brome
* *Bromus tectorum*—cheatgrass
Elymus elymoides—squirreltail
Festuca microstachys—small fescue
Hordeum jubatum—foxtail barley
* *Hordeum murinum*—mouse barley
Melica imperfecta—smallflower melicgrass
Poa secunda—onesided bluegrass
* *Schismus arabicus*—Arabian schismus
Stipa speciosa—desert needlegrass

THEMIDACEAE—BRODIAEA FAMILY

Dichelostemma capitatum ssp. *capitatum*—bluedicks

Wildlife

Invertebrate

NYMPHALIDAE—BRUSH-FOOTED BUTTERFLIES

Junonia coenia—common buckeye

PIERIDAE—WHITES AND SULFURS BUTTERFLIES

Pieris rapae—cabbage white

Reptile

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis longipes—western fence lizard

Uta stansburiana elegans—western side-blotched lizard

TEIIDAE—WHIPTAIL LIZARDS

Aspidoscelis tigris tigris—Great Basin whiptail

Bird

ICTERIDAE—BLACKBIRDS

Icterus bullockii—Bullock's oriole

Icterus cucullatus—hooded oriole

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus—bushtit

FALCONIDAE—CARACARAS AND FALCONS

Falco sparverius—American kestrel

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus—house finch

Spinus lawrencei—Lawrence's goldfinch

Spinus psaltria—lesser goldfinch

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis saya—Say's phoebe

Tyrannus verticalis—western kingbird

Tyrannus vociferans—Cassin's kingbird

ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis—red-tailed hawk

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

Calypte costae—Costa's hummingbird

CORVIDAE—CROWS AND JAYS

Aphelocoma californica—California scrub-jay

Corvus corax—common raven

ALAUDIDAE—LARKS

Eremophila alpestris—horned lark

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—northern mockingbird

Toxostoma redivivum—California thrasher

ODONTOPHORIDAE—NEW WORLD QUAIL

Callipepla californica—California quail

PASSERIDAE—OLD WORLD SPARROWS

* *Passer domesticus*—house sparrow

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

* *Streptopelia decaocto*—Eurasian collared-dove

CUCULIDAE—CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus—greater roadrunner

LANIIDAE—SHRIKES

Lanius ludovicianus—loggerhead shrike

HIRUNDINIDAE—SWALLOWS

Stelgidopteryx serripennis—northern rough-winged swallow

TURDIDAE—THRUSHES

Sialia currucoides—mountain bluebird

Sialia mexicana—western bluebird

REMIZIDAE—PENDULINE TITS AND VERDINS

Auriparus flaviceps—verdin

PARULIDAE—WOOD-WARBLERS

Setophaga coronata—yellow-rumped warbler

TROGLODYTIDAE—WRENS

Campylorhynchus brunneicapillus—cactus wren

Salpinctes obsoletus—rock wren

Thryomanes bewickii—Bewick's wren

PASSERELLIDAE—NEW WORLD SPARROWS

Artemisiospiza belli—Bell's sparrow

Chondestes grammacus—lark sparrow

Melozone crissalis—California towhee

Passerculus sandwichensis—savannah sparrow

Zonotrichia leucophrys—white-crowned sparrow

Mammal

CANIDAE—WOLVES AND FOXES

Canis latrans—coyote

LEPORIDAE—HARES AND RABBITS

Lepus californicus—black-tailed jackrabbit

Sylvilagus bachmani—brush rabbit

SCIURIDAE—SQUIRRELS

Ammospermophilus leucurus—white-tailed antelope squirrel

Spermophilus (*Otospermophilus*) *beecheyi*—California ground squirrel

* signifies introduced (non-native) species

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Appendix 3.2B

Potential to Occur Table and Compendia – Clean

Potential to Occur Tables

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the California Environmental Quality Act Guidelines (CEQA) (14 CCR 15000 et seq.) are referred to as "special-status plant species" and, as used in this document, include (1) plant species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act[1] (FESA); and/or (2) plant species with a California Rare Plant Rank as designated by the California Native Plant Society[2].

Endangered, rare, or threatened wildlife species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR Section 15380(b)), are referred to as "special-status wildlife species" and, as used in this document, include (1) wildlife species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of CESA and FESA[3]; (2) California Species of Special Concern as designated by the California Department of Fish and Wildlife[4]; and (3) mammals and birds that are fully protected species as described in the California Fish and Game Code, Sections 4700 and 3511[5].

The potential for special-status plant species to occur within the Study Area was assessed based on known geographic and elevation ranges as well as habitat and soil conditions that are known to support species occurring in the region. Potential for special-status wildlife species to occur within the Study Area was assessed based on known geographic ranges, the presence/absence of suitable habitat, and other natural history elements that might predict their occurrence. After completion of the reconnaissance surveys, the potential for special-status plant and wildlife species to occur on or near the Project site was summarized according to the following categories. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided:

- Known to occur: the species has been documented on the property by a reliable source.
- High potential to occur: the species has not been documented on the property but is known to recently occur in the vicinity and suitable habitat is present.
- Moderate potential to occur: the species has not been documented on the property or in the vicinity, but the site is within the known range of the species and suitable habitat for the species is present.
- Low potential to occur: the species has not been documented in the vicinity or on the property, but the site is within the known range of the species; however, suitable habitat for the species on site is of low quality.
    - A low potential to occur is also given to species that have suitable habitat present and the site is within the geographic and elevation range of the species, but the species was not observed during surveys that were conducted during the species' blooming period.
- Not expected to occur: the property is outside the known geographic or elevational range of the species and/or the site does not support suitable habitat for the species.

1 CDFW. 2025. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Accessed April 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.
2 CNPS. 2025. Inventory of Rare and Endangered Plants (online edition, v8-03). Accessed April 2025. www.rareplants.cnps.org.
3 CDFW. 2025. State and Federally Listed Endangered and Threatened Animals of California. Accessed April 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline.
4 CDFW. 2025. Species of Special Concern. Accessed April 2025. https://www.wildlife.ca.gov/Conservation/SSC.
5 CDFW. 2025h. Fully Protected Animals. Accessed April 2025. https://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html.

Special-Status Plants

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Acanthoscyphus parishii var. *abramsii*	Abrams' oxytheca	None/None/1B.2	Chaparral/annual herb/June–Aug/ 3,750–6,745	Not expected to occur. The Study Area is outside this species current range.
Androsace elongata ssp. *acuta*	California androsace	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland/annual herb/ Mar–June/490–4,280	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Anomobryum julaceum	slender silver moss	None/None/4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; Roadsides (usually)/ moss/N.A./330–3,280	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Aphyllon validum ssp. *validum*	Rock Creek broomrape	None/None/1B.2	Chaparral, Pinyon and juniper woodland; Granitic/perennial herb (parasitic)/ May–Sep/3,380–6,560	Not expected to occur. Suitable micro-habitat (granitic) for the species is not present in the Study Area.
Arctostaphylos glandulosa ssp. *gabrielensis*	San Gabriel manzanita	None/None/1B.2	Chaparral/perennial evergreen shrub/ Mar/1,950–4,920	Not expected to occur. This conspicuous species was not observed in the Study Area.
Arctostaphylos parryana ssp. *tumescens*	interior manzanita	None/None/4.3	Chaparral (montane), Cismontane woodland/perennial evergreen shrub/ Feb–Apr/6,890–7,580	Not expected to occur. This conspicuous species was not observed in the Study Area.
Asplenium vespertinum	western spleenwort	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub; Rocky/perennial rhizomatous herb/Feb–June/ 590–3,280	Low potential to occur. Suitable habitat for the species is present in the Study Area, but records for the species are from the southern and eastern San Gabriel Mountains.
Astragalus hornii var. *hornii*	Horn's milk-vetch	None/None/1B.1	Meadows and seeps, Playas; Alkaline, Lake Margins/annual herb/May–Oct/ 195–2,785	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/ perennial evergreen shrub/ (Feb)Mar–June/230–2,705	Not expected to occur. This conspicuous species was not observed in the Study Area.
Calochortus clavatus var. *clavatus*	club-haired mariposa lily	None/None/4.3	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Clay, Rocky, Serpentine (usually)/perennial bulbiferous herb/ (Mar)May–June/100–4,265	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus clavatus var. *gracilis*	slender mariposa-lily	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland/perennial bulbiferous herb/Mar–June (Nov)/1,045–3,280	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus palmeri var. *palmeri*	Palmer's mariposa-lily	None/None/1B.2	Chaparral, Lower montane coniferous forest, Meadows and seeps; Mesic/ perennial bulbiferous herb/Apr–July/ 2,325–7,840	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Calochortus plummerae	Plummer's mariposa-lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland; Granitic, Rocky/perennial bulbiferous herb/May–July/330–5,580	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus striatus	alkali mariposa-lily	None/None/1B.2	Chaparral, Chenopod scrub, Meadows and seeps, Mojavean desert scrub; Alkaline, Mesic/perennial bulbiferous herb/Apr–June/230–5,230	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Calystegia peirsonii	Peirson's morning-glory	None/None/4.2	Chaparral, Chenopod scrub, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland/perennial rhizomatous herb/ Apr–June/100–4,920	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Canbya candida	white pygmy-poppy	None/None/4.2	Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland; Granitic, Gravelly, Sandy/ annual herb/ Mar–June/1,970–4,790	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Castilleja gleasoni	Mt. Gleason paintbrush	None/SR/1B.2	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; Granitic/perennial herb (hemiparasitic)/ May–June (Sep)/3,805–7,115	Not expected to occur. Suitable habitat for the species is present in the Study Area but the Study Area is outside the range of the species.
Castilleja plagiotoma	Mojave paintbrush	None/None/4.3	Great Basin scrub (alluvial), Joshua tree "woodland", Lower montane coniferous forest, Pinyon and juniper woodland/ perennial herb (hemiparasitic)/ Apr–June/985–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1B.1	Marshes and swamps, Valley and foothill grassland, Vernal pools/annual herb/ May–Nov/0–1,570	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	None/SE/1B.1	Coastal scrub, Valley and foothill grassland/annual herb/Apr–July/ 490–4,000	Not expected to occur. Marginal habitat is present in the Study Area; however, no recent records along the SR-14.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Chorizanthe spinosa	Mojave spineflower	None/None/4.2	Chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, Playas; Alkaline (sometimes)/annual herb/Mar–July/ 20–4,265	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Claytonia peirsonii ssp. *peirsonii*	Peirson's spring beauty	None/None/1B.2	Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Metamorphic, Scree, Talus/perennial herb/(Mar) May–June/4,955–9,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Clinopodium mimuloides	monkey-flower savory	None/None/4.2	Chaparral, North Coast coniferous forest; Mesic, Streambanks/perennial herb/ June–Oct/1,000–5,905	Not expected to occur. Suitable micro-habitats (mesic and streambanks) for the species are not present in the Study Area.
Diplacus johnstonii	Johnston's monkeyflower	None/None/4.3	Lower montane coniferous forest (disturbed areas, gravelly, roadsides, rocky, scree)/annual herb/May–Aug/ 3,200–9,580	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub; Flood deposited terraces and washes/annual herb/Apr–June/ 655–2,490	Not expected to occur. Suitable micro-habitats (Flood deposited terraces and washes) for the species are not present in the Study Area.
Erigeron breweri var. *jacinteus*	San Jacinto Mountains daisy	None/None/4.3	Subalpine coniferous forest, Upper montane coniferous forest; Rocky/ perennial rhizomatous herb/June–Sep/ 8,860–9,515	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Eriogonum umbellatum var. *minus*	alpine sulfur-flowered buckwheat	None/None/4.3	Subalpine coniferous forest, Upper montane coniferous forest; Gravelly/ perennial herb/June–Sep/ 5,905–10,065	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Erythranthe diffusa	Palomar monkeyflower	None/None/4.3	Chaparral, Lower montane coniferous forest; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–June/ 4,005–6,005	Not expected to occur. The Study Area is below the elevation range of the species.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Frasera neglecta	pine green-gentian	None/None/4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest/perennial herb/ May–July/4,595–8,205	Not expected to occur. The Study Area is below the elevation range of the species.
Galium angustifolium ssp. *gabrielense*	San Antonio Canyon bedstraw	None/None/4.3	Chaparral, Lower montane coniferous forest; Granitic, Rocky (sometimes), Sandy (sometimes)/perennial herb/ Apr–Aug/3,935–8,695	Not expected to occur. The Study Area is below the elevation range of the species.
Galium angustifolium ssp. *gracillimum*	slender bedstraw	None/None/4.2	Joshua tree "woodland", Sonoran desert scrub; Granitic, Rocky/perennial herb/ Apr–June (July)/425–5,085	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Galium jepsonii	Jepson's bedstraw	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Granitic, Gravelly (sometimes), Rocky (sometimes)/perennial rhizomatous herb/July–Aug/5,055–8,205	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Galium johnstonii	Johnston's bedstraw	None/None/4.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Riparian woodland/perennial herb/ June–July/4,005–7,545	Not expected to occur. The Study Area is below the elevation range of the species.
Goodmania luteola	golden goodmania	None/None/4.2	Meadows and seeps, Mojavean desert scrub, Playas, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/annual herb/Apr–Aug/ 65–7,220	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Heuchera abramsii	Abrams' alumroot	None/None/4.3	Upper montane coniferous forest (rocky)/perennial rhizomatous herb/ July–Aug/9,185–11,485	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Heuchera caespitosa	urn-flowered alumroot	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Riparian forest (montane), Upper montane coniferous forest; Rocky/perennial rhizomatous herb/May–Aug/3,790–8,695	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Horkelia cuneata var. *puberula*	mesa horkelia	None/None/1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/ perennial herb/Feb–July (Sep)/ 230–2,660	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Hulsea vestita ssp. *gabrielensis*	San Gabriel Mountains sunflower	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Rocky/ perennial herb/May–July/ 4,920–8,205	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Hulsea vestita ssp. *parryi*	Parry's sunflower	None/None/4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; Carbonate (sometimes), Granitic (sometimes), Openings, Rocky/perennial herb/ Apr–Aug/4,495–9,500	Not expected to occur. The Study Area is below the elevation range of the species.
Imperata brevifolia	California satintail	None/None/2B.1	Chaparral, Coastal scrub, Meadows and seeps, Mojavean desert scrub, Riparian scrub; Mesic/perennial rhizomatous herb/Sep–May/0–3,985	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Juglans californica	Southern California black walnut	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous tree/Mar–Aug/ 165–2,955	Not expected to occur. This conspicuous species was not observed in the Study Area.
Juncus duranii	Duran's rush	None/None/4.3	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest; Mesic/perennial rhizomatous herb/July–Aug/ 5,800–9,200	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lepechinia fragrans	fragrant pitcher sage	None/None/4.2	Chaparral/perennial shrub/Mar–Oct/ 65–4,300	Not expected to occur. This conspicuous species was not observed in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3	Chaparral, Coastal scrub/annual herb/ Jan–July/5–2,905	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Leptosiphon aureus	Golden linanthus	None/None/4.2	Chaparral, Cismontane woodland, Valley and foothill grassland/annual herb/ Apr—May/5-2,300	Present. Numerous observations of the species were mapped within the gen-tie portion of the Study Area
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland; Openings/ perennial bulbiferous herb/ Mar–July (Aug)/100–5,905	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Lilium parryi	lemon lily	None/None/1B.2	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; Mesic/perennial bulbiferous herb/ July–Aug/4,000–9,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Linanthus concinnus	San Gabriel linanthus	None/None/1B.2	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest; Openings, Rocky/annual herb/Apr–July/ 4,985–9,185	Not expected to occur. The Study Area is below the elevation range of the species.
Loeflingia squarrosa var. *artemisiarum*	sagebrush loeflingia	None/None/2B.2	Desert dunes, Great Basin scrub, Sonoran desert scrub; Sandy/annual herb/Apr–May/2,295–5,295	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lupinus albifrons var. *johnstonii*	interior bush lupine	None/None/4.3	Chaparral, Lower montane coniferous forest; Decomposed granitic/perennial shrub/May–July/4,920–8,205	Not expected to occur. The Study Area is below the elevation range of the species.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Lupinus elatus	silky lupine	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest/ perennial herb/June–Aug/4,920–9,845	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lupinus peirsonii	Peirson's lupine	None/None/1B.3	Joshua tree "woodland", Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; Gravelly, Rocky/ perennial herb/Apr–June/3,280–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Lycium torreyi	Torrey's box-thorn	None/None/4.2	Mojavean desert scrub, Sonoran desert scrub; Rocky, Sandy, Streambanks, Washes/perennial shrub/(Jan–Feb)Mar–June (Sep–Nov)/-165–4,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Malacothamnus davidsonii	Davidson's bush-mallow	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous shrub/June–Jan/ 605–3,740	Not expected to occur. This conspicuous species was not observed in the Study Area.
Monardella australis ssp. *gabrielensis*	San Gabriel Mountains monardella	None/None/1B.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest; Granitic, Openings/shrub/July–Sep/ 5,245–7,215	Not expected to occur. The Study Area is below the elevation range of the species.
Monardella australis ssp. *gabrielensis*	San Gabriel Mountains monardella	None/None/1B.2	Broadleafed upland forest, Chaparral (montane), Lower montane coniferous forest; Granitic, Openings/shrub/ July–Sep/5,250–7,220	Not expected to occur. The Study Area is below the elevation range of the species.
Monardella exilis	Mojave monardella	None/None/4.2	Chenopod scrub, Desert dunes, Great Basin scrub, Joshua tree "woodland", Lower montane coniferous forest, Mojavean desert scrub, Pinyon and juniper woodland; Sandy/annual herb/ Apr–Sep/1,970–6,725	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Monardella viridis	green monardella	None/None/4.3	Broadleafed upland forest, Chaparral, Cismontane woodland/perennial rhizomatous herb/June–Sep/ 330–3,315	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Mucronea californica	California spineflower	None/None/4.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland; Sandy/annual herb/ Mar–July (Aug)/0–4,595	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Muhlenbergia californica	California muhly	None/None/4.3	Chaparral, Coastal scrub, Lower montane coniferous forest, Meadows and seeps; Mesic, Seeps, Streambanks/perennial rhizomatous herb/June–Sep/330–6,560	Not expected to occur. Suitable micro-habitats (mesic, seeps, and streambanks) for the species are not present in the Study Area.
Muilla coronata	crowned muilla	None/None/4.2	Chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland/perennial bulbiferous herb/Mar–Apr (May)/ 2,200–6,430	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/ 100–2,150	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Nemacladus secundiflorus var. *robbinsii*	Robbins' nemacladus	None/None/1B.2	Chaparral, Valley and foothill grassland; Openings/annual herb/Apr–June/ 1,150–5,580	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Opuntia basilaris var. *brachyclada*	short-joint beavertail	None/None/1B.2	Chaparral, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland/perennial stem/ Apr–June (Aug)/1,390–5,905	Present. Four individuals were identified in the gen-tie portion of the Study Area during the 2023 focused rare plant surveys.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/ 50–2,165	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Oreonana vestita	woolly mountain-parsley	None/None/1B.3	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest; Gravelly (sometimes), Talus (sometimes)/ perennial herb/Mar–Sep/5,300–11,485	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Packera ionophylla	Tehachapi ragwort	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial herb/ June–July/4,920–8,860	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Perideridia pringlei	adobe yampah	None/None/4.3	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland; Clay (often), Serpentine/ perennial herb/Apr–June (July)/ 985–5,905	Not expected to occur. Suitable micro-habitats (clay and serpentine soils) for the species are not present in the Study Area.
Phacelia mohavensis	Mojave phacelia	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/ annual herb/Apr–Aug/4,595–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	Chaparral, cismontane woodland, Coastal scrub, Riparian woodland; gravelly benches, dry stream bottoms, Sandy/perennial herb/ (July) Aug–Nov (Dec)/0–6,885	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Quercus durata var. *gabrielensis*	San Gabriel oak	None/None/4.2	Chaparral, Cismontane woodland/ perennial evergreen shrub/Apr–May/ 1,475–3,280	Not expected to occur. This conspicuous species was not observed in the Study Area.
Quercus engelmannii	Engelmann oak	None/None/4.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland/perennial deciduous tree/ Mar–June/165–4,265	Not expected to occur. This conspicuous species was not observed in the Study Area.
Selaginella asprella	bluish spike-moss	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial rhizomatous herb/July/5,250–8,860	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Senecio astephanus	San Gabriel ragwort	None/None/4.3	Chaparral, Coastal scrub; Rocky, Slopes/ perennial herb/May–July/ 1,310–4,920	Not expected to occur. The Study Area is outside the range of the species.
Sidotheca caryophylloides	chickweed oxytheca	None/None/4.3	Lower montane coniferous forest (sandy)/annual herb/July–Sep (Oct)/ 3,655–8,530	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Stylocline masonii	Mason's neststraw	None/None/1B.1	Chenopod scrub, Pinyon and juniper woodland; Sandy/annual herb/ Mar–May/330–3,935	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Symphyotrichum greatae	Greata's aster	None/None/1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland; Mesic/perennial rhizomatous herb/ June–Oct/985–6,590	Not expected to occur. Suitable micro-habitat (mesic conditions) for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Syntrichopappus lemmonii	Lemmon's syntrichopappus	None/None/4.3	Chaparral, Joshua tree "woodland", Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/ annual herb/Apr–May (June)/1,640–6,005	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Thysanocarpus rigidus	rigid fringepod	None/None/1B.2	Pinyon and juniper woodland; Dry, Rocky, Slopes/annual herb/Feb–May/ 1,965–7,215	Not expected to occur. Herbarium records for the species are only from San Diego and Riverside counties.
Yucca brevifolia	western Joshua tree	None/SC/CBR	Great Basin grassland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland, Sonoran desert scrub, Valley and foothill grassland/perennial leaf succulent/ Apr–May/1,310–6,560	Not expected to occur. This conspicuous species was not observed in the Study Area.

Status Legend
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
State
SC: State candidate for listing
SE: State listed as endangered
SR: State designated as rare
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California but more common elsewhere
4: Plants of limited distribution
CBR: Considered by Rejected for a CRPR
Threat Rank
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% of 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)

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Special-Status Wildlife

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/CSL	Open grassland and scrub communities supporting suitable floral resources	Moderate potential to occur. The species may nest and forage in the Study Area; however, 2024 focused surveys for the species conducted in the Study Area were negative for the species.
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	Not expected to occur (overwintering). Suitable habitat for the species is not present in the Study Area; however, the species may be transient through the area during migration.
Euphydryas editha quino	quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex)	Not expected to occur. The Study Area is outside the current range of the species.
Glyptostoma gabrielense	San Gabriel chestnut	None/None	Native to a narrow strip of the front range of the San Gabriel Mountains about 15 miles (24 km) long near Pasadena, California, where it inhabits riparian canyons and other areas with sufficient seasonal moisture	Not expected to occur. The Study Area is outside the current range of the species.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Helminthoglypta fontiphila	Soledad shoulderband	None/None	known only from Little Rock Creek Canyon on the north flank of the San Gabriel Mountains and from the Santa Clara River in Soledad Canyon	Not expected to occur. The Study Area is outside the current range of the species.
Helminthoglypta traskii pacoimensis	Pacoima shoulderband	None/None	Known only from Pacoima Canyon on the west slope of the San Gabriel Mountains	Not expected to occur. The Study Area is outside the current range of the species.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Fish				
Catostomus santaanae	Santa Ana sucker	FT/None	Small, shallow, cool, clear streams less than 7 meters (23 feet) in width and a few centimeters to more than a meter (1.5 inches to more than 3 feet) in depth; substrates are generally coarse gravel, rubble, and boulder	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	FE/FP, SE	Slow-moving and backwater areas	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rhinichthys gabrielino	Santa Ana speckled dace	None/SSC	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Amphibians				
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana boylii pop. 6	foothill yellow-legged frog - south coast DPS	FE/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana muscosa	mountain yellow-legged frog	FE/SE	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Taricha torosa (Monterey Co. south only)	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Reptiles				
Actinemys pallida	southwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Anniella pulchra/ Anniella stebbinsi/ Anniella spp.	northern California legless lizard/ southern California legless lizard/ California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Moderate potential to occur. Suitable habitat is present throughout the Study Area and there are recent records in the region; however, moist sandy or loose, loamy soils are limited in the Study Area to beneath the larger California junipers due to the expected higher moisture content of the soil.
Arizona elegans occidentalis	California glossy snake	None/SSC	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils	Low potential to occur. Suitable habitat is present throughout the Study Area.
Aspidoscelis tigris stejnegeri	Coastal whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	Low potential to occur. Suitable habitat is present throughout the Study Area; however, the Study Area is in the northern limits of the species.
Diadophis punctatus modestus	San Bernardino ring-necked snake	None/None	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed-conifer forest, and woodland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gopherus agassizii	Mojave desert tortoise	FT/ST	Arid and semi-arid habitats in Mojave and Sonoran Deserts, including sandy or gravelly locations along riverbanks, washes, sandy dunes, canyon bottoms, desert oases, rocky hillsides, creosote flats, and hillsides	Not expected to occur. Suitable habitat for the species is not present in the Study Area, which is also outside the range of the species.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Moderate potential to occur. Suitable habitat is present throughout the Study Area and there are recent nearby records.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	Not expected to occur (nesting). Suitable habitat for the species is not present in the Study Area.
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Moderate potential to occur. Suitable habitat is present throughout the Study Area.
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to nest in the Study Area. Low potential for wintering and as a transient during foraging and migration. There is a 1965 record for nesting by the species to the south of the Study Area in Aliso Canyon.
Artemisiospiza belli belli	Bell's sage sparrow	None/WL	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Moderate potential to occur. Suitable habitat is present throughout the Study Area.
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/CSL	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur in the Study Area. The Study Area is outside of the predicted habitat for the species (CDFW 2024b) and no diagnostic sign of the species was observed during the many surveys of the Study Area

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Buteo regalis (wintering)	ferruginous hawk	None/WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	Low potential to occur. Marginal wintering habitat is present in the Study Area but local wintering records of the species are from the Antelope Valley, north of the Study Area.
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur for nesting in the Study Area but may occur as a transient during migration.
Charadrius (*Anarhynchus*) *montanus* (wintering)	mountain plover	BCC/SSC	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Falco mexicanus (nesting)	prairie falcon	None/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Geococcyx californianus	greater roadrunner	None/None	Include areas dominated by creosote, mesquite, chaparral, and tamarisk, as well as grasslands, riparian woodlands and canyons; nest sites are 3 to 10 feet or more off the ground, on a horizontal branch or in the crotch of a sturdy bush, cactus, or small tree	Occurs. The species was observed in the Study Area during the surveys and nesting habitat is found in the California juniper woodland. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Gymnogyps californianus	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees *(Sequoiadendron giganteus*); forages in relatively open habitats where large animal carcasses can be detected	Not expected to occur for nesting. Suitable nesting habitat for the species is not present in the Study Area. The species could be a transient in the area for foraging.
Icterus parisorum	Scott's oriole (breeding)	None/None	Breeding in Los Angeles County is concentrated in a few tracts of extensive Joshua tree woodland in the eastern Antelope Valley and patches of pinyon-juniper woodland on the north flank of the San Gabriel Mountains	Low potential to occur. While the Study Area does have juniper woodland, breeding records of the species in the region are from the desert slope of the San Gabriel Mountains (eBird 2025). The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Lanius ludovicianus (nesting)	loggerhead shrike	BCC/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Present. An individual was observed in 2023, suitable habitat for the species is present in the Study Area, and there are recent local records.
Pooecetes gramineus	vesper sparrow	None/None	Breeds in the northern United States and Canada and in the West in mountain meadows, grassy mesas, and sagebrush steppe up to 9,800 feet; winters in open grasslands and sparse shrublands in the valley and desert regions of Los Angeles County.	Low potential to occur. The species could occur during the winter season but it is not expected to nest. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Sturnella neglecta	western meadowlark	None/None	Commonly be found in agricultural land and other open habitats in the Antelope Valley	Low potential to occur. The Study Area lacks breeding habitat for the species but it could forage on site. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Toxostoma lecontei	LeConte's thrasher	BCC/SSC	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Low potential to occur for roosting and may forage over the Study Area. Suitable roosting habitat (trees) for the species is present in the Study Area.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None/None	Desert wash, desert scrub, desert succulent scrub, and pinyon–juniper woodland	Not expected to occur. In Los Angeles County, records of the species are from the eastern desert foothills of the San Gabriel Mountains.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/None	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Low potential to occur. Suitable habitat is present throughout the Study Area; however, the Study Area is in the northern limits of the species.
Ovis canadensis nelsoni	Nelson's bighorn sheep	None/FP	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Myotis thysanodes	fringed myotis	None/None	Drier woodlands (oak, pinyon–juniper, and ponderosa pine), desert scrub, mesic coniferous forest, grassland, and sage–grass steppe; sea level to 9,350 ft; roosts in buildings, mines, rocks, cliff faces, bridges, and large, decadent trees and snags	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Myotis volans	long-legged myotis	None/None	Primarily coniferous forests, but also seasonally in riparian and desert habitats; roosts in crevices in cliffs, caves, mines, buildings, exfoliating tree bark, and snags	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Myotis yumanensis	Yuma myotis	None/None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Neotamias speciosus speciosus	lodgepole chipmunk	None/None	Lodgepole pine forests	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Ovis canadensis nelsoni	Nelson's bighorn sheep	None/FP	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Perognathus inornatus	San Joaquin pocket mouse	None/None	Open grassland and scrub areas on fine-textured soils	Not expected to occur. In Los Angeles County, records of the species are from the foothills of the Liebre Mountains.
Puma concolor (Southern California/Central Coast Evolutionarily Significant Unit)	mountain lion	None/CSL	Require large areas of relatively undisturbed habitats with adequate connectivity; these often consist of pine forests, riparian and oak woodlands, streams, chaparral, and grasslands, though they are also known to occur in desert habitats	High potential to occur. The Study Area is part of large areas of relatively undisturbed habitats with adequate connectivity so it is expected that the species could use the Study Area as part of a home range. State Route 14 may reduce connectivity between the San Gabriel and Sierra Pelona mountains but not prohibit it. The species is not expected to have natal dens in the Study Area since females typically avoid establishing a den near human activity (Center for Biological Diversity and the Mountain Lion Foundation 2019)
Taxidea taxus	American badger	None/SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils; needs sufficient food, friable soils and open, uncultivated ground; preys on burrowing rodents and digs burrows	Low potential to occur. Suitable habitat is present in the Study Area but no individuals were observed and no diagnostic sign (i.e., burrows or digs with the species' conspicuous claw marks) were observed during the extensive surveys. There is one record within 20 miles of the Study Area from 1930 at Lake Los Angeles (CDFW 2025). There is one 2021 iNaturalist record approximately 8.6 miles to the west near Agua Dulce (iNaturalist 2025).

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Xerospermophilus mohavensis	Mohave ground squirrel	None/ST	Desert scrub habitats including those dominated by creosote bush and burrobush, desert sink scrub, and desert saltbush scrub	Not expected to occur. Suitable habitat for the species is not present in the Study Area and it is outside the range of the species.

[1] **Status Legend**
Federal
BCC: Bird of Conservation Concern (U.S. Fish and Wildlife Service)
FC: Candidate for federal listing as threatened or endangered
FE: Federally listed as endangered
FT: Federally listed as threatened
State
FP: California Fully Protected Species
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened
CSL: Candidate for State Listing
WL: CDFW Watch List Species

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Plant and Wildlife Compendia

The following compendia documents the plant and wildlife species that were observed during the surveys for the Project.

Plants

Gymnosperms and Gnetophytes

CUPRESSACEAE—CYPRESS FAMILY

Juniperus californica—California juniper

EPHEDRACEAE—EPHEDRA FAMILY

Ephedra californica—California joint fir

Ephedra viridis—Mormon tea

Eudicots

ADOXACEAE—MUSKROOT FAMILY

Sambucus nigra ssp. *caerulea*—blue elderberry

APIACEAE—CARROT FAMILY

Lomatium mohavense—Mojave desertparsley

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia acanthicarpa—flatspine bur ragweed

Ambrosia salsola var. *salsola*—burrobrush

Artemisia ludoviciana—white sagebrush

Artemisia tridentata ssp. *parishii*—big sagebrush

Artemisia tridentata ssp. *tridentata*—basin big sagebrush

Artemisia tridentata—big sagebrush

Chaenactis artemisiifolia—white pincushion

Chaenactis fremontii—pincushion flower

Chaenactis glabriuscula—yellow pincushion

Corethrogyne filaginifolia—sand-aster

Encelia actoni—Acton's brittle brush

Encelia farinosa—brittle bush

Encelia frutescens—button brittlebush

Ericameria brachylepis—chaparral goldenbush

Ericameria linearifolia—narrowleaf goldenbush

Ericameria nauseosa var. *hololeuca*—rubber rabbitbrush

Ericameria pinifolia—pinebush
Eriophyllum confertiflorum var. *confertiflorum*—golden-yarrow
Eriophyllum pringlei—Pringle's woolly sunflower
Gutierrezia californica—California match weed
Lasthenia glaberrima—smooth goldfields
Lasthenia gracilis—needle goldfields
Layia glandulosa—whitedaisy tidytips
Layia platyglossa—coastal tidytips
Malacothrix glabrata—smooth desertdandelion
Matricaria discoidea—disc mayweed
Senecio flaccidus—threadleaf ragwort
Stephanomeria pauciflora—brownplume wirelettuce
Tetradymia stenolepis—Mojave cottonthorn
Uropappus lindleyi—Lindley's silverpuffs

BORAGINACEAE—BORAGE FAMILY

Amsinckia douglasiana—Douglas' fiddleneck
Amsinckia menziesii—Menzies' fiddleneck
Cryptantha angustifolia—Panamint cryptantha
Cryptantha intermedia—Clearwater cryptantha
Harpagonella palmeri—Palmer's grapplinghook
Nemophila menziesii—baby blue eyes
Phacelia crenulata var. *ambigua*—purplestem phacelia
Phacelia distans—distant phacelia
Phacelia fremontii—Fremont's phacelia
Phacelia tanacetifolia—lacy phacelia
Pholistoma membranaceum—white fiestaflower

BRASSICACEAE—MUSTARD FAMILY

* *Hirschfeldia incana*—shortpod mustard
* *Sisymbrium altissimum*—tall tumblemustard

CACTACEAE—CACTUS FAMILY

Cylindropuntia echinocarpa—Wiggins' cholla
Opuntia basilaris var. *basilaris*—beavertail pricklypear
Opuntia basilaris var. *brachyclada*—short-joint beavertail
Opuntia littoralis—coast prickly pear

CHENOPODIACEAE—GOOSEFOOT FAMILY

Atriplex argentea—silverscale saltbush
Atriplex canescens—fourwing saltbush

Chenopodium californicum—California goosefoot
Grayia spinosa—spiny hop sage

CUCURBITACEAE—GOURD FAMILY

Marah macrocarpa—Cucamonga manroot

EUPHORBIACEAE—SPURGE FAMILY

Euphorbia albomarginata—whitemargin sandmat

FABACEAE—LEGUME FAMILY

Acmispon glaber—deer weed
Acmispon maritimus var. *maritimus*—coastal bird's-foot trefoil
Acmispon parviflorus—desert deervetch
Lupinus bicolor—miniature lupine

GERANIACEAE—GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill

LAMIACEAE—MINT FAMILY

Salvia apiana—white sage
Salvia carduacea—thistle sage
Salvia *columbariae*—chia
Salvia dorrii var. *pilosa*—purple sage
Scutellaria mexicana—Mexican bladdersage

LOASACEAE—LOASA FAMILY

Mentzelia ravenii—no common name

MONTIACEAE—MONTIA FAMILY

Calyptridium monandrum—common pussypaws

NYCTAGINACEAE—FOUR O'CLOCK FAMILY

Mirabilis laevis var. *crassifolia*—California four o'clock

ONAGRACEAE—EVENING PRIMROSE FAMILY

Camissonia contorta—plains evening primrose
Eulobus californicus—California suncup
* *Oenothera biennis*—common evening primrose

OROBANCHACEAE—BROOM-RAPE FAMILY

Castilleja exserta ssp. *exserta*—exserted Indian paintbrush

PAPAVERACEAE—POPPY FAMILY

Eschscholzia californica—California poppy
Eschscholzia minutiflora—pygmy poppy
Platystemon californicus—creamcups

PLANTAGINACEAE—PLANTAIN FAMILY

Penstemon spectabilis—showy penstemon

POLEMONIACEAE—PHLOX FAMILY

Eriastrum densifolium—giant woollystar

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum fasciculatum—California buckwheat
Rumex hymenosepalus—canaigre dock

RANUNCULACEAE—BUTTERCUP FAMILY

Delphinium parishii—desert larkspur

SOLANACEAE—NIGHTSHADE FAMILY

Lycium cooperi—peach thorn

Monocots

AGAVACEAE—AGAVE FAMILY

* *Agave americana*—American century plant
Hesperoyucca whipplei—chaparral yucca

POACEAE—GRASS FAMILY

* *Avena fatua*—wild oat
Bromus carinatus—California brome
* *Bromus diandrus*—ripgut brome
* *Bromus hordeaceus*—soft brome
* *Bromus madritensis* ssp. *rubens*—red brome
* *Bromus tectorum*—cheatgrass
Elymus elymoides—squirreltail
Festuca microstachys—small fescue
Hordeum jubatum—foxtail barley
* *Hordeum murinum*—mouse barley
Melica imperfecta—smallflower melicgrass
Poa secunda—onesided bluegrass
* *Schismus arabicus*—Arabian schismus
Stipa speciosa—desert needlegrass

THEMIDACEAE—BRODIAEA FAMILY

Dichelostemma capitatum ssp. *capitatum*—bluedicks

Wildlife

Invertebrate

NYMPHALIDAE—BRUSH-FOOTED BUTTERFLIES

Junonia coenia—common buckeye

PIERIDAE—WHITES AND SULFURS BUTTERFLIES

Pieris rapae—cabbage white

Reptile

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis longipes—western fence lizard

Uta stansburiana elegans—western side-blotched lizard

TEIIDAE—WHIPTAIL LIZARDS

Aspidoscelis tigris tigris—Great Basin whiptail

Bird

ICTERIDAE—BLACKBIRDS

Icterus bullockii—Bullock's oriole

Icterus cucullatus—hooded oriole

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus—bushtit

FALCONIDAE—CARACARAS AND FALCONS

Falco sparverius—American kestrel

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus—house finch

Spinus lawrencei—Lawrence's goldfinch

Spinus psaltria—lesser goldfinch

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis saya—Say's phoebe

Tyrannus verticalis—western kingbird

Tyrannus vociferans—Cassin's kingbird

ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis—red-tailed hawk

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

Calypte costae—Costa's hummingbird

CORVIDAE—CROWS AND JAYS

Aphelocoma californica—California scrub-jay

Corvus corax—common raven

ALAUDIDAE—LARKS

Eremophila alpestris—horned lark

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—northern mockingbird

Toxostoma redivivum—California thrasher

ODONTOPHORIDAE—NEW WORLD QUAIL

Callipepla californica—California quail

PASSERIDAE—OLD WORLD SPARROWS

* *Passer domesticus*—house sparrow

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

* *Streptopelia decaocto*—Eurasian collared-dove

CUCULIDAE—CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus—greater roadrunner

LANIIDAE—SHRIKES

Lanius ludovicianus—loggerhead shrike

HIRUNDINIDAE—SWALLOWS

Stelgidopteryx serripennis—northern rough-winged swallow

TURDIDAE—THRUSHES

Sialia currucoides—mountain bluebird

Sialia mexicana—western bluebird

REMIZIDAE—PENDULINE TITS AND VERDINS

Auriparus flaviceps—verdin

PARULIDAE—WOOD-WARBLERS

Setophaga coronata—yellow-rumped warbler

TROGLODYTIDAE—WRENS

Campylorhynchus brunneicapillus—cactus wren

Salpinctes obsoletus—rock wren

Thryomanes bewickii—Bewick's wren

PASSERELLIDAE—NEW WORLD SPARROWS

Artemisiospiza belli—Bell's sparrow

Chondestes grammacus—lark sparrow

Melozone crissalis—California towhee

Passerculus sandwichensis—savannah sparrow

Zonotrichia leucophrys—white-crowned sparrow

Mammal

CANIDAE—WOLVES AND FOXES

Canis latrans—coyote

LEPORIDAE—HARES AND RABBITS

Lepus californicus—black-tailed jackrabbit

Sylvilagus bachmani—brush rabbit

SCIURIDAE—SQUIRRELS

Ammospermophilus leucurus—white-tailed antelope squirrel

Spermophilus (*Otospermophilus*) *beecheyi*—California ground squirrel

* signifies introduced (non-native) species

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Appendix 3.2G
Biota Report – Redline

Biota Report
Prairie Song Reliability Project

~~OCTOBER~~ DECEMBER 2025

Prepared for:

PRAIRIE SONG RELIABILITY PROJECT LLC

Prepared by:

DUDEK
225 South Lake Avenue, Suite M210
Pasadena, California 91101
Contact: Michael Cady, Senior Biologist

Table of Contents

SECTION **PAGE NO.**

Acronyms and Abbreviations vi

1 Introduction 1
1.1 Project Location 1
1.2 Project Description 2
1.2.1 Transmission and Interconnection 3

2 Environmental Setting 7
2.1 On-Site Conditions 7
2.2 Soils 7
2.3 Regional Conditions 8
2.3.1 Hydrologic Features 8

3 Regulatory Context 13
3.1 Federal Regulations 13
3.2 State Regulations 14
3.3 Local Regulations 17

4 Methods 21
4.1 Literature/Database Review 21
4.2 Special-Status Plant and Wildlife Species Assessment 21
4.3 Field Effort 22
4.3.1 Vegetation Community and Land Cover Mapping 24
4.3.2 Aquatic Resource Delineation 24
4.3.3 Rare Plants 25
4.3.4 California Desert Native Plants Act 25
4.3.5 Crotch's Bumble Bee Surveys 25
4.3.6 Raptor Nest Survey 26
4.3.7 Protected Tree Census 26

5 Results 27
5.1 Vegetation Communities and Land Covers 27
5.2 Special-Status Plant Species 34
5.3 Special-Status Wildlife Species 35
5.4 Potential Jurisdictional Wetlands and Waters 42
5.5 Wildlife Corridors and Habitat Linkages 46
5.6 California Desert Native Plant Act Covered Species 46
5.7 Significant Ecological Area Protected Trees 50

6 Project Impacts to Significant Ecological Area Resources 54

6.1 Definition of Impacts 54
6.1.1 Explanation of Project Consistency with Significant Ecological Area Conditional Use Permit Compatibility Criteria 54
6.2 Impacts to Special-Status Plants 55
6.3 Impacts to Special-Status Wildlife 56
6.4 Impacts to Vegetation Communities 57
6.5 Impacts to Water Resources 59
6.6 Impacts to Protected Trees 59
7 Mitigation Measures 63
8 Significant Ecological Areas Statement of Findings 73
9 References 77
~~Acronyms and Abbreviations ..... v~~
~~1 Introduction ..... 1~~
~~1.1 Project Location ..... 1~~
~~1.2 Project Description ..... 1~~
~~2 Environmental Setting ..... 5~~
~~2.1 On Site Conditions ..... 5~~
~~2.2 Soils ..... 5~~
~~2.3 Regional Conditions ..... 6~~
~~2.3.1 Hydrologic Features ..... 6~~
~~3 Regulatory Context ..... 11~~
~~3.1 Federal Regulations ..... 11~~
~~3.2 State Regulations ..... 12~~
~~3.3 Local Regulations ..... 15~~
~~4 Methods ..... 19~~
~~4.1 Literature/Database Review ..... 19~~
~~4.2 Special-Status Plant and Wildlife Species Assessment ..... 19~~
~~4.3 Field Effort ..... 20~~
~~4.3.1 Vegetation Community and Land Cover Mapping ..... 22~~
~~4.3.2 Aquatic Resource Delineation ..... 22~~
~~4.3.3 Rare Plants ..... 23~~
~~4.3.4 California Desert Native Plants Act ..... 23~~
~~4.3.5 Crotch's Bumble Bee Surveys ..... 23~~
~~4.3.6 Raptor Nest Survey ..... 24~~
~~4.3.7 Protected Tree Census ..... 24~~
~~5 Results ..... 25~~
~~5.1 Vegetation Communities and Land Covers ..... 25~~

5.2 Special-Status Plant Species 32
5.3 Special-Status Wildlife Species 33
5.4 Potential Jurisdictional Wetlands and Waters 39
5.5 Wildlife Corridors and Habitat Linkages 43
5.6 California Desert Native Plant Act Covered Species 43
5.7 Significant Ecological Area Protected Trees 47

6 Project Impacts to Significant Ecological Area Resources 51
6.1 Definition of Impacts 51
6.1.1 Explanation of Project Consistency with Significant Ecological Area Conditional Use Permit Compatibility Criteria 51
6.2 Impacts to Special-Status Plants 52
6.3 Impacts to Special-Status Wildlife 52
6.4 Impacts to Vegetation Communities 54
6.5 Impacts to Water Resources 55
6.6 Impacts to Protected Trees 55

7 Mitigation Measures 59

8 Significant Ecological Areas Statement of Findings 67

9 References 71

TABLES

Table 1. Project Parcels 1
Table 2. Approximate New Ground Disturbance Area Associated with Transmission and Interconnection Facilities 3
Table 3. Recommended Preservation Ratios for SEA CUP 19
Table 4. Schedule of Surveys 23
Table 5. Vegetation Communities and Land Covers in the Study Area 27
Table 6. Summary of Potential Jurisdictional Waters Within the Study Area 43
Table 7. California Desert Native Plant Act Covered Species in the Survey Area 46
Table 8. Summary of Trees in the Study Area 50
Table 9. Potential Impacts to Special-Status Wildlife Habitat Within the SEA 56
Table 10. Potential Impacts to Vegetation Communities and Land Covers in the Santa Clara River Significant Ecological Area Portion of the Study Area 58
Table 11. Summary of Potential Impacts to SEA Protected Trees (Non-Heritage) 60
Table 12. Summary of Potential Impacts to SEA Protected Heritage Trees 60
Table 12. Summary of Potential Individual Species Replacement Quantities 61
Table 13. Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved 65
1 Recommended Preservation Ratios for SEA CUP 17
2 Schedule of Surveys 21

3 Vegetation Communities and Land Covers in the Study Area 25
4 Summary of Potential Jurisdictional Waters Within the Study Area 40
5 California Desert Native Plant Act Covered Species in the Survey Area 43
6 Summary of Trees in the Study Area 47
7 Potential Impacts to Special-Status Wildlife Habitat Within the SEA 53
8 Potential Impacts to Vegetation Communities and Land Covers in the Santa Clara River Significant Ecological Area Portion of the Study Area 54
9 Summary of Potential Impacts to SEA Protected Trees (Non-Heritage) 56
10 Summary of Potential Impacts to SEA Protected Heritage Trees 56
11 Summary of Potential Individual Species Replacement Quantities 57
12 Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved 61

FIGURES

1 Project Location 5
2 Soils 9
3 Hydrologic Setting 11
4 Vegetation Communities and Land Cover 29
5 Biological Survey Results 38
6 Potential Jurisdictional Aquatic Resources 44
7 California Desert Native Plant Act Covered Species in the Survey Area 48
8 Protected Trees 52
1 Project Location 3
2 Soils 7
3 Hydrologic Setting 9
4 Vegetation Communities and Land Cover 27
5 Biological Survey Results 35
6 Potential Jurisdictional Aquatic Resources 41
7 California Desert Native Plant Act Covered Species in the Survey Area 45
8 Protected Trees 49

APPENDICES

A Protected Tree Report
B Biological Constraints Map
C Potential to Occur Tables and Compendia
D Conceptual Project Design

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Acronyms and Abbreviations

Acronym	Definition
BESS	battery energy storage system
CDFW	California Department of Fish and Wildlife
CDNPA	California Desert Native Plants Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Los Angeles
CRPR	California Rare Plant Rank
CUP	Conditional Use Permit
FESA	federal Endangered Species Act
gen-tie	generation interconnection
MM	Mitigation Measure
OHWM	ordinary high-water mark
Project	Prairie Song Reliability Project
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SEA	Significant Ecological Area
SR	State Route
SSC	California Species of Special Concern
TPZ	tree protection zone
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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1 Introduction

This report presents the findings of a biological resources assessment conducted for the proposed Prairie Song Reliability Project (Project). The purpose of this assessment was to evaluate the existing biological conditions and provide an analysis of the Project's potential impacts on the County of Los Angeles (County) Significant Ecological Area (SEA) resources as identified within the Los Angeles County SEA Ordinance Implementation Guide (Los Angeles County Regional Planning 2020). The generation interconnection (gen-tie) line route alignments for the Project are located in the Santa Clara River SEA, but the existing conditions are given for the Project as a whole.

1.1 Project Location

The Project is in unincorporated Los Angeles County, California, south of State Route (SR) 14. The Project is within the U.S. Geological Survey (USGS) 7.5-minute Acton and Pacifico Mountain quadrangles, Township 5N, Range 12W, Sections 27, 28, 33, and 34 (Figure 1, Project Location). The battery energy storage system (BESS) site consists of Assessor's Parcel Numbers 3056-017-007, 3056-017-020, 3056-017-021, 3056-019-013, 3056-019-026, 3056-019-037, and 3056-019-040. Development of the BESS facility will occur on an area of land situated between two existing transportation corridors, the Antelope Valley Freeway (SR-14) to the north and Southern Pacific Railroad lines and Carson Mesa Road to the south, which are approximately 1,200 feet apart.

The Project will utilize one (1) of two (2) potential gen-tie routes. Either route will extend south and east from the Project substation, crossing Southern Pacific Railroad tracks and West Carson Mesa Road, and then proceed northeast to the Point of Interconnection at the Vincent Substation. The Northern Gen-Tie Route is approximately 1.1 miles long and will be sited on portions of Assessor's Parcel Numbers 3056-015-008, 3056-015-023, 3056-017-026, 3056017904, 3056-017-905, 3056-005-816, 3056-005-817, 3056-005-818, 3056-015-801, and 3056015-802. The Southern Gen-Tie Route is approximately 1.8 miles long and will be sited on portions of Assessor's Parcel Numbers 3056015008, 3056-015-023, 3056-017-016, 3056-017-022, 3056-017-026, 3056-017-027, 3056-017-028, 3056-027-007, 3056-027-031, 3056-005-816, 3056-005-817, 3056-005-818, 3056-015-801, and 3056015802 (see Table 1 below). The full acreage of the parcels is provided in Table 1. The Project will also include three (3) fiber optic telecommunications lines: one (1) will be installed aboveground on the gen-tie structures (along whichever gen-tie route is ultimately selected), and the other two (2) will be installed underground within the Southern Gen-Tie Route corridor. The two (2) other fiber optic lines will be installed underground within the Southern Gen-Tie Route corridor regardless of which gen-tie route corridor option is selected. The Project's interconnection facilities will be located within the Southern California Edison (SCE) Vincent Substation. Land uses in the immediate vicinity of the Project include undeveloped and rural lands, multiple high-voltage transmission lines and an electrical substation, paved and rural roads, SR-14, and railroad lines.

Table 1. Project Parcels

Assessor's Parcel Number	Acreage
3056-005-816	1.28
3056-005-817	6.41
3056-005-818	15.18
3056-015-008	40.18
3056-015-023	39.89

Table 1. Project Parcels

Assessor's Parcel Number	Acreage
3056-015-801	23.43
3056-015-802	5.02
3056-017-016	5.14
3056-017-022	10.01
3056-017-026	10.16
3056-017-027	10.17
3056-017-028	10.25
3056-017-904	10.43
3056-017-905	10.15
3056-027-007	40.41
3056-027-031	4.98

The nearest municipality to the Project site is the City of Palmdale, which is located approximately 4 miles to the northeast. There are a few single-family residences adjacent to the BESS facility site's northern and western boundaries, as well as a few other single-family residences in the vicinity of the gen-tie line.

1.2 Project Description

Prairie Song Reliability Project LLC, a Delaware limited liability company (applicant), a subsidiary of Coval Infrastructure DevCo LLC, a Delaware limited liability company, proposes to construct, operate, and eventually repower or decommission the up to 1,150-megawatt Project located on up to approximately 107 acres in unincorporated Los Angeles County. The primary components of the Project include a containerized BESS facility utilizing lithium-iron phosphate cells, or similar technology, operations and maintenance buildings, an on-site Project substation, a 500-kilovolt overhead gen-tie transmission line, and interconnection facilities within the existing SCE-owned and operated Vincent Substation.

Electrical energy will be transferred from the existing power grid to the Project for storage and from the Project to the power grid when additional electricity is needed. The Project will provide additional capacity to the electrical grid to assist with serving load during periods of peak demand by charging when demand is low and discharging when demand is high. This operating principle increases the integration of additional intermittent renewable energy, such as wind and solar, in California's energy mix and reduces the need to operate natural gas power plants. The Project will also serve as an additional local/regional capacity resource that will enhance grid reliability, particularly to the Los Angeles Basin local reliability area and may allow for the deferral or avoidance of regional transmission facilities.

The Project will be remotely operated and monitored year-round and supported by on-site operations and maintenance staff 7 days a week. The Project will be available to receive or deliver energy 24 hours a day and 365 days a year. During the operational life of the Project, qualified technicians will inspect the Project facilities and conduct necessary maintenance to ensure reliable and safe operational readiness.

Please refer to Appendix D for a Conceptual Project Design map.

1.2.1 Transmission and Interconnection

The Project will be interconnected to the regional electrical transmission grid via an approximately 1.1-mile-long or 1.8-mile-long new single-circuit 500kV gen-tie line within an up-to 150-foot-wide corridor between the Project substation and the SCE Vincent Substation. Construction of the gen-tie line is expected to start in December 2027 and conclude in July 2028.

- Site preparation, BMP installation, and civil work is expected to take approximately 2 months.
- Foundation setting and tower erection is expected to take approximately 4 months
- Transmission line stringing, pulling, and tensioning is expected to take approximately 1 month.

Additional specifics regarding gen-tie line construction are provided below:

The Applicant will construct and own the portion of the gen-tie line between the Project substation and the Point of Change of Ownership (POCO) transmission structure and SCE will construct and own the remaining portion of the gen-tie from the POCO to the POI within the Vincent Substation. The Project's transmission and interconnection facilities will include the following components:

- 500kV Gen-Tie Line including Transmission Structures and Conductors
- Fiber Optic Telecommunications Utility Poles and Fiber Optic Lines
- Access Paths
- Temporary Work Areas
- Interconnection Facilities within Existing SCE Vincent Substation Footprint (SCE constructed and owned)

The proposed route was selected to minimize the number of existing utility crossings, cross existing utilities at the optimum locations, minimize the total gen-tie line length and number of transmission structures required, minimize the number of turning structures required, and enter the Vincent Substation as close as possible to the POI. The proposed transmission structures were sited to avoid potential impacts to environmental resources. Table 2 summarizes the preliminary new ground disturbance area associated with construction of the transmission and interconnection facilities (Southern Gen-Tie scenario).

Table 2. Approximate New Ground Disturbance Area Associated with Transmission and Interconnection Facilities

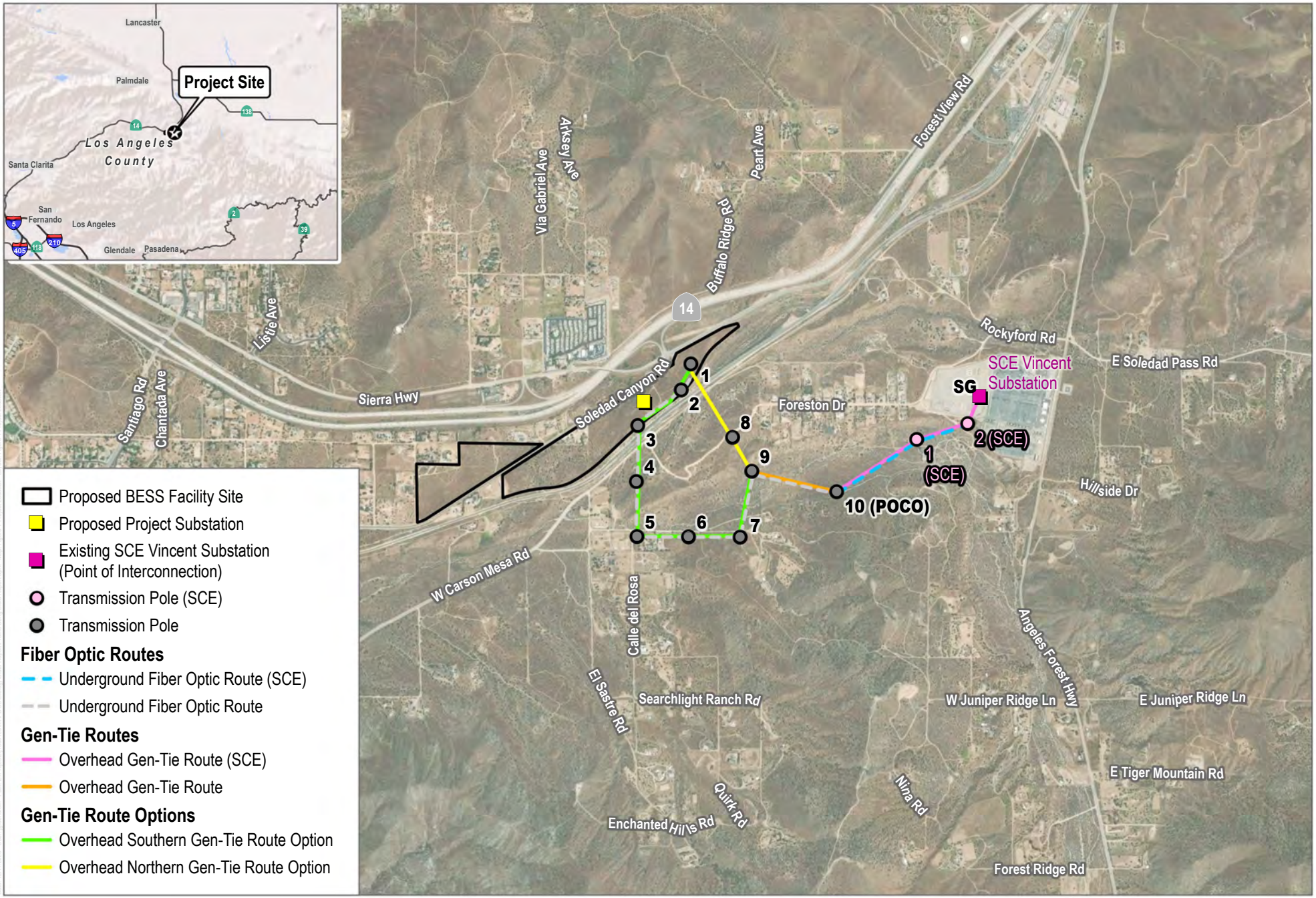
Component	Permanent Disturbance	Temporary Disturbance
Applicant Portion		
Transmission Structure Pads	2.48 acres	–
Transmission Structure Access Path	1.14 acres	–
Laydown Area	–	4.23 acres
Tension and Pulling Sites (i.e., Gen-Tie Work Area)	–	19.4 acres
Applicant Total	**3.62 acres**	**~23.63 acres**

Table 2. Approximate New Ground Disturbance Area Associated with Transmission and Interconnection Facilities

Component	Permanent Disturbance	Temporary Disturbance
SCE Portion		
Transmission Structure Pad	0.3 acres	—
Transmission Structure Access Path	0.5 acres	—
Tension and Pulling Sites (i.e., Gen-Tie Work Area)	—	8.99 acres
SCE Total	0.8 acres	8.99 acres

Note: gen-tie = generation interconnection; SCE = Southern California Edison.

If determined to be required by the director or agency with primary responsibility for fire protection, Public Resources Code Sections 4292 and 4293 require 10 feet of vegetation clearance in all directions for any transmission line operating above 110 kilovolts (kV). The project's proposed 500 kV gen-tie line is designed to be higher than 35 feet above the ground surface during heavy sag conditions. The majority of the gen-tie line is greater than 45 feet above ground during heavy sag conditions, meaning that vegetation would need to be at least 35 feet tall to require maintenance for fuel modification. The vegetation communities in this area do not typically grow to be 35 feet tall so it is unlikely any fuel modification will be required. However, there are two areas where the proposed gen-tie line is near 35 feet above the ground. In these two areas, fuel modification may be necessary, on a spot basis, to limit the height of vegetation to comply with Public Resources Code Sections 4292 and 4293. These two areas are shown on Figure 3A, Conceptual Project Design – Graded Areas. Vegetation Maintenance area 1 (VM1) is a 40-foot by 40 foot area at the top of a ridge. There is a road on the top of the ridge making it unlikely that any vegetation maintenance will be necessary near where the gen-tie line approached 35 above the surface. Vegetation Management area 2 (VM2) is a 360-foot by 40-foot long area between gen-tie pole 9 and gen-tie pole 10 (POCO) where the proposed gen-tie line is less than 40 feet above the ground surface. There is the potential for vegetation management along VM2 for any vegetation that approaches 30 feet in height.



SOURCE: World Imagery

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Prairie Song Reliability Project

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2 Environmental Setting

2.1 On-Site Conditions

The Project site refers to the area that may be physically affected by construction activities associated with the Project, including the location of permanent structures (including both gen-tie options), as well as staging and other temporary disturbance areas described. For the purposes of the biological surveys, the Study Area encompasses the parcels that make up the Project site and additional parcels that have been acquired by the Project applicant. The Study Area for focused species surveys was expanded per protocol and where necessary to capture nearby resources.

APNs 3056-017-905, 3056-017-904, 3056-017-906, and 3056-017-907 are managed by the Mountains Recreation and Conservation Authority and are deed restricted for open space use (see Figure 9: Regional Setting). The Northern Gen-tie option would obtain an aerial easement and span these parcels, but would not generate any impacts on the ground, except for the use of an existing roadway. There are no protected lands adjacent to the Project site.

2.2 Soils

According to the U.S. Department of Agriculture (2025a) Web Soil Survey, there are seven (7) soil map units that occur within the Study Area, as shown in Figure 2, Soils: Greenfield sandy loam, 2% to 9% slopes (GsC); Hanford coarse sandy loam, 0% to 2% slopes (HbA); Hanford coarse sandy loam, 2% to 9% slopes (HbC); Hanford coarse sandy loam, 9% to 15% slopes (HbD); Hanford sandy loam, 2% to 9% slopes (HcC); Terrace escarpments (TsF); and Vista coarse sandy loam, 30% to 50% slopes (VsF). Of the seven (7) soil map units, only one (1) is ranked as partially hydric: Hanford coarse sandy loam, 0% to 2% slopes.

The Greenfield soil series consists of deep, well-drained soils formed in moderately coarse to coarse-textured alluvium derived from granitic and mixed rock sources. These soils are typically found on alluvial fans and terraces with slopes ranging from 0% to 30%. In Southern California, Greenfield soils experience a dry, subhumid climate with hot, dry summers and cool, moist winters, receiving approximately 9 to 20 inches of annual precipitation. The soils exhibit moderately rapid permeability and low organic matter content, supporting vegetation such as annual grasses, forbs, scattered shrubs, and occasional oak trees in uncultivated areas (USDA 2025a)

The Hanford soil series, common in alluvial valleys of Southern California, consists of well-drained, moderately permeable soils formed in coarse-loamy alluvium derived primarily from granitic sources. These soils typically occur on stream terraces and alluvial fans with slopes ranging from 0% to 15%. Hanford soils exhibit low organic content and are generally dry from late spring through fall, with seasonal moisture during winter months. Their physical characteristics support a range of land uses, including agriculture and urban development, and they typically host annual grasses and herbaceous vegetation in undeveloped areas (USDA 2025a).

The Vista soil series consists of moderately deep, well-drained soils formed in material weathered from decomposed granitic rocks. These soils typically occur on hills and mountainous uplands with slopes ranging from 2% to 85%. Vista soils exhibit coarse sandy loam textures, moderately rapid permeability, and low organic matter content. They are found in areas with a subhumid mesothermal climate, receiving approximately 10 to 22 inches of annual

precipitation. Native vegetation includes annual grasses, forbs, and drought-tolerant shrubs such as California sagebrush (*Artemisia californica*), chamise (*Adenostoma fasciculatum*), and scrub oak (*Quercus* spp.) (USDA 2025a).

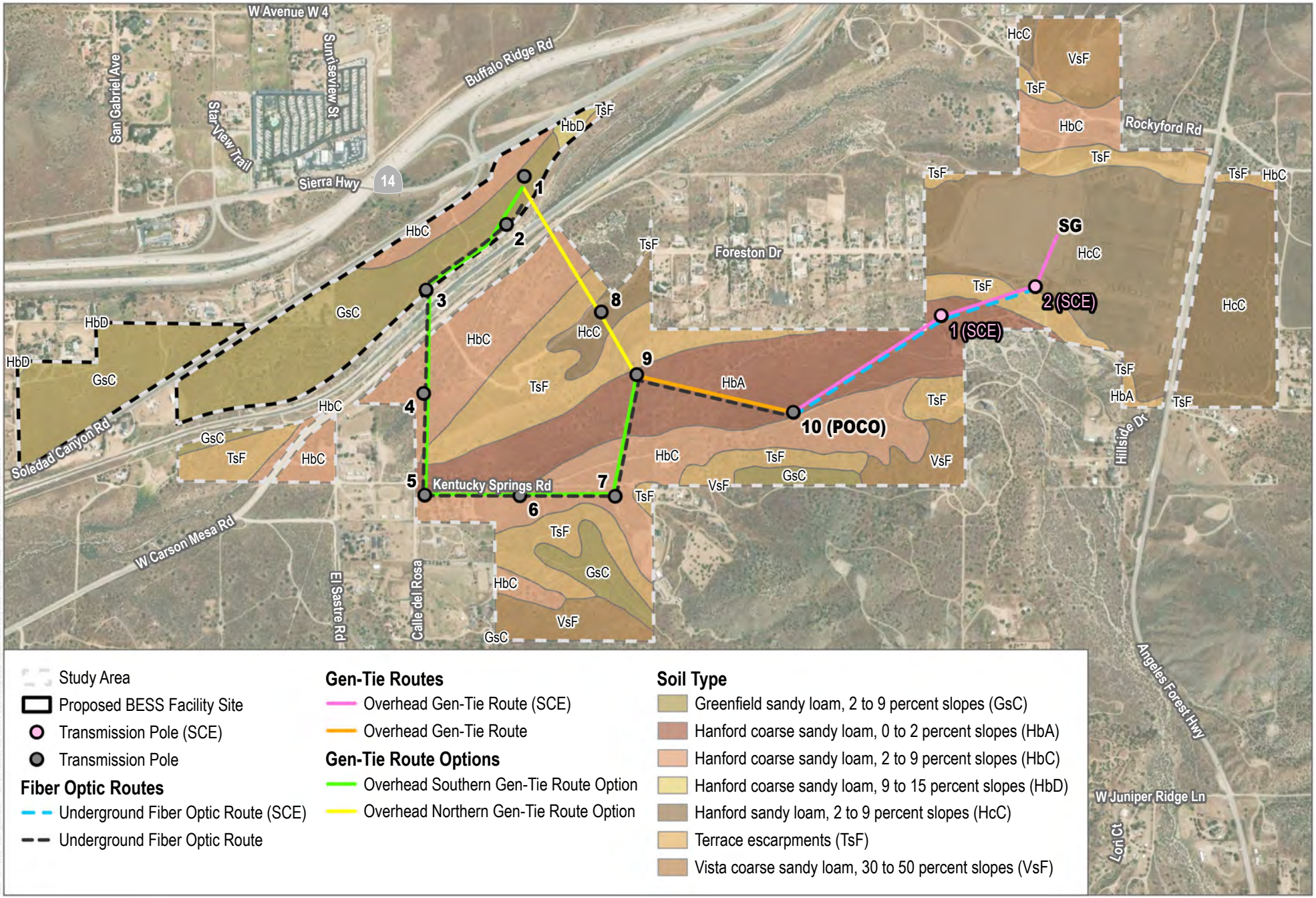
2.3 Regional Conditions

The Study Area is in the western San Gabriel Mountains, in the Transverse Ranges Geomorphic Province (CGS 2002). The Transverse Ranges are an east/west-trending series of steep mountains and valleys (CGS 2002). The Study Area is located at the conjunction of Soledad Canyon and Kentucky Springs Canyon (USGS 2022) and at the boundary of the Western Transverse Ranges ecological subregion and the Mojave Desert ecological region (Jepson Flora Project 2025). Elevations in the Study Area range from approximately 2,700 feet above mean sea level along the southwestern side to 3,500 feet above mean sea level along the northern hillsides (Google Earth 2025).

The Study Area has an arid climate with the site being located on the northern side of the San Gabriel Mountains and bordering the Antelope Valley. August is the average warmest month, with an average high of 93˚F, and December is the coolest month on average, with a low of 36˚F. Rainfall occurs primarily between November and April, with the maximum average precipitation occurring in February. The mean annual rainfall for the area is approximately 9 inches of rain per year (LACPW 2025).

2.3.1 Hydrologic Features

The Study Area is in the Santa Clara subbasin (HUC 18070102), Headwaters Santa Clara River watershed (HUC 1807010201), and primarily Kentucky Springs Canyon–Santa Clara River subwatershed, with the westernmost area of the Project overlapping into the Arrastre Canyon–Santa Clara River subwatershed. The Santa Clara River is the primary natural surface water feature in the vicinity of the Study Area. The Santa Clara River is the largest natural river remaining in Southern California and travels through two (2) counties, Los Angeles and Ventura (Kennedy/Jenks Consultants 2014). The northern portion in Los Angeles County is largely classified as an intermittent stream/river and only contains flowing water during certain times of the year (USGS 2023Kennedy/Jenks Consultants 2014). The intermittent stream channel traverses the southern end of the Study Area within parcels 3056-019-040, 3056-017-907, 3056-017-028, 3056-017-027, 3056-015-008, and 3056-015-023, as shown in Figure 3, Hydrologic Setting. Several other smaller, unnamed ephemeral washes from Soledad Canyon and Kentucky Springs Canyon drain across the northern and southern portions of the Study Area, respectively. The National Wetlands Inventory and National Hydrography Dataset were reviewed to identify wetland or hydrologic features in the Study Area (USFWS 2025a; USGS 2023). Figure 3 depicts the mapped wetland and hydrologic features in the Study Area.



SOURCE: World Imagery; USDA

DUDEK

0 500 1,000 Feet

FIGURE 2

Soils

Prairie Song Reliability Project

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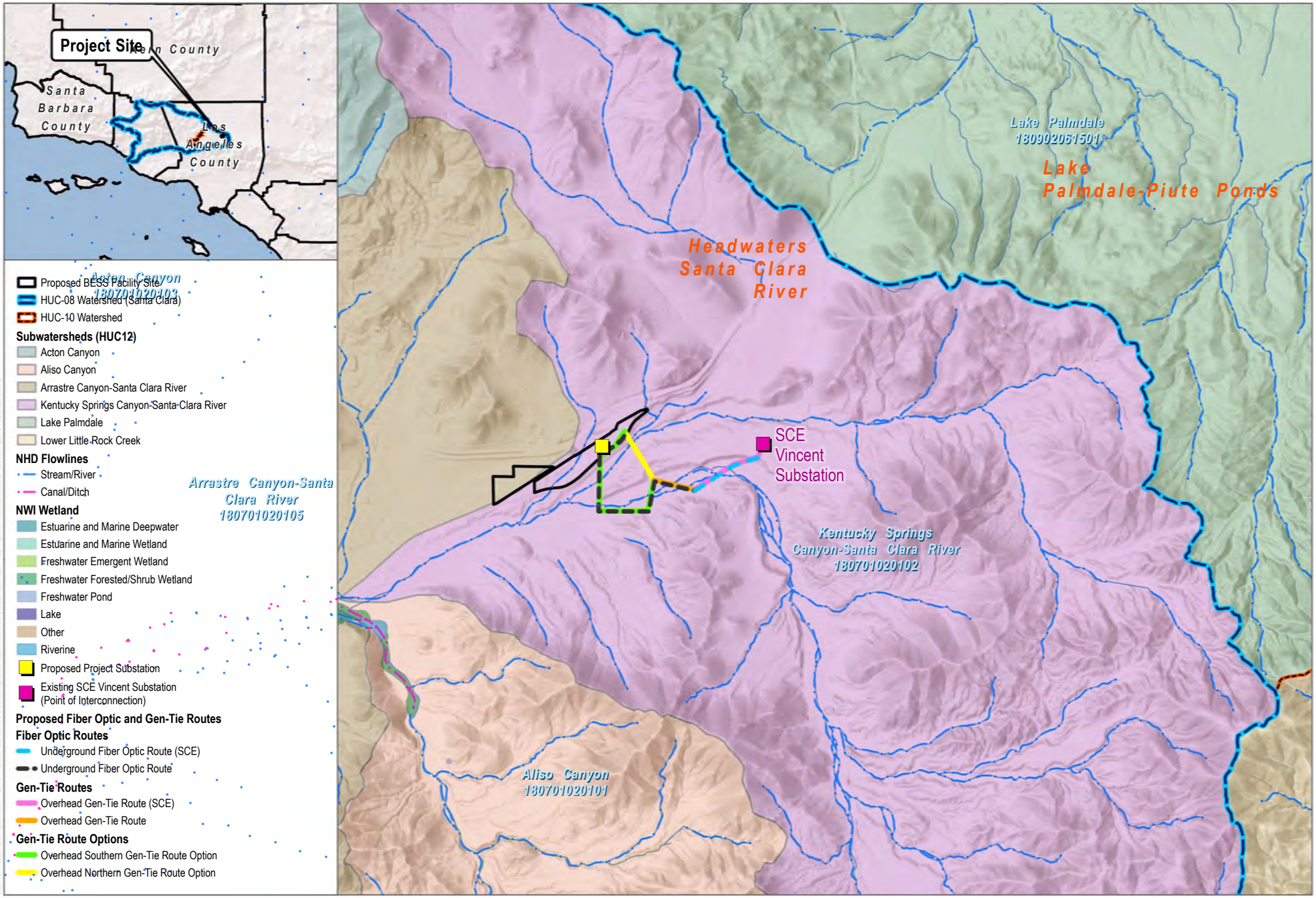

SOURCE: World HIllshade; SWRQCB

DUDEK

0 2,300 4,600 Feet

FIGURE 3

Hydrologic Setting

Prairie Song Reliability Project

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3 Regulatory Context

3.1 Federal Regulations

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and wildlife species and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. FESA is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and to provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. FESA defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to take any listed species; "take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of Incidental Take Permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue Incidental Take Permits for listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703 et seq.), as amended, prohibits the intentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a Memorandum of Understanding. USFWS reviews actions that might affect these species.

Clean Water Act

The Clean Water Act provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the Clean Water Act. The Regional Water Quality Control Boards (RWQCBs) administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found at 33 Code of Federal Regulations (CFR) 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with USACE

(40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies. USACE exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters, such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features.

The extent of waters of the United States is generally defined as that portion that falls within the limits of an ordinary high-water mark (OHWM). Typically, the OHWM corresponds to the water surface elevation of a 2-year flood event (USACE 2008b). In addition, waters of the United States may include wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, defined by USACE as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[c]). Indicators of three (3) wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE.

3.2 State Regulations

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which prohibits the take of plant and wildlife species designated by the Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, "take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA declares the policy of the state that public agencies should not approve projects that would "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any wildlife determined by the commission as rare on or before January 1, 1985, is a 'threatened species.'" A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." CESA does not list invertebrate species.

Porter–Cologne Water Quality Control Act

The intent of the Porter–Cologne Water Quality Control Act is to protect water quality and the beneficial uses of water, and it applies to both surface water and groundwater. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the nine (9) RWQCBs develop basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of both statewide and basin plans. Waters regulated under the Porter–Cologne Water Quality Control Act include isolated waters that are no longer regulated by USACE. Developments with impact to jurisdictional waters must demonstrate compliance with the goals of the act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain an order of Waste Discharge Requirement (or, in cases where a Clean Water Act Section 401 certification is required, a waiver of Waste Discharge Requirement).

California Fish and Game Code

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of birds, mammals, reptiles and amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern (SSC) because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Section 1602

Under Section 1602 of the California Fish and Game Code, a project operator is required to notify CDFW prior to any project that would substantially divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" is defined as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life" (14 CCR 1.72). Based on this definition, a watercourse with "a surface or subsurface flows that supports or has supported riparian vegetation" is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events.

Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW may require implementation of reasonable measures necessary to protect the resource. These modifications are formalized in a Streambed Alteration Agreement, which becomes part of the plans, specifications, and bid documents for the project.

Nesting Birds

Section 3503 of the California Fish and Game Code states that "it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof "may not be taken or possessed at any time," unless otherwise provide for by law or authorized by CDFW.

Section 3513 states that "it is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act."

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (see Section 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this state." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" wildlife into the act as threatened species but did not do so for rare plants. Thus, there are three (3) listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are typically specified in a formal agreement between CDFW and the project proponent.

California Desert Native Plant Act

The purpose of the California Desert Native Plants Act (CDNPA) is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands. The CDNPA only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. Within these counties, the CDNPA prohibits the harvest, transport, sale, or possession of specific native desert plants unless a person has a valid permit or wood receipt, and the required tags and seals. The appropriate permits, tags, and seals must be obtained from the county sheriff or commissioner of the county where collecting will occur, and the county will charge a fee.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.) requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of potential impacts.

Special-Status Plants and Wildlife

CEQA Guidelines Section 15380(b)(1) defines endangered wildlife or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare wildlife or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the Federal Endangered Species Act." Additionally, a wildlife or plant species may be presumed to be endangered, rare, or threatened if it meets the criteria for listing as defined further in CEQA Guidelines Section 15380(c) or otherwise meets the criteria of Section 15380(b).

Special-Status Vegetation Communities

Section IV, Appendix G (Environmental Checklist Form) of the CEQA Guidelines (14 CCR 15000 et seq.) requires an evaluation of impacts to "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."

3.3 Local Regulations

Los Angeles County 2035 General Plan

The General Plan includes guiding principles that inform the County's goals, policies, and implementation actions. The following goals and policies are relevant to the Project and applicable to biological resources (County of Los Angeles 2015):

Goal C/NR 1: Open space areas that meet the diverse needs of Los Angeles County.

> Policy C/NR 1.3: Support the acquisition of new available open space areas. Augment this strategy by leveraging County resources in concert with the compatible open space stewardship actions of other agencies, as feasible and appropriate.

Goal C/NR 2: Effective collaboration in open space resource preservation.

> Policy C/NR 2.2: Encourage the development of multi-benefit dedicated open spaces.

> Policy C/NR 3.8: Discourage development in areas with identified significant biological resources, such as SEAs.

County of Los Angeles Significant Ecological Areas

SEAs are officially designated areas "where the County deems it important to facilitate a balance between development and biological resource conservation" ~~within the County with irreplaceable biological resources~~ (see Figure 5). The SEA program objective is to conserve genetic and physical diversity within the County by designating biological resource areas that can sustain themselves into the future, and balancing that objective against other critical public needs. The SEA program also protects native trees and provides a list of the protected species and the size of the diameter of the trunk that triggers protection. The SEA Ordinance establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights.

The SEA Ordinance ~~includes~~identifies 60 tree species to be protected in addition to already protected oak trees (Los Angeles County Regional Planning 2020). The SEA Protected Tree List specifies the species of tree protected in each individual SEA and the size of the tree when regulations are applied. Per County Code 22.102.070 (Protected Tree Permit), development that complies with Section 22.102.090 (SEA Development Standards) shall require a Protected Tree Permit from the County except for Subsection 22.102.090.B (SEA Protected Trees) of the County Code, and which includes any of the following impacts:

1. Pruning or trimming of branches of SEA Protected Trees in excess of two inches in diameter or 25 percent of live foliage for one or more trees;

2. Encroachments of up to 30 percent into an SEA Protected Tree's protected zone. Any encroachment of more than 30 percent into the protected zone of a tree shall be considered as a tree removal...;

3. Removal of up to two SEA Protected Trees that are not designated as Heritage Trees [(single trunk that measures 36 inches or more in diameter or two trunks that collectively measure 54 inches or more in diameter)]; or

4. Tree relocation poses significant risk to the health or survival rate of a tree. Any relocation of an SEA Protected Tree shall, therefore, be processed as a removal.

A discretionary SEA Conditional Use Permit (CUP) application is required for development that cannot demonstrate compliance with Section 22.102.070 (Protected Tree Permit) or Sections 22.102.090 (SEA Development Standards) and 22.102.100 (Natural Open Space Preservation) of the County Code. Los Angeles County Regional Planning has issued the SEA Ordinance Implementation Guide (Los Angeles County Regional Planning 2020) to help proposed development comply with the ordinance.

The gen-tie line route alignments for the Project are located in the Santa Clara River SEA. Depending on the final route and pole locations, the proposed Project may require an SEA CUP, but for the California Energy Commission's Opt-In Application for Certification process, because it may have impacts to SEA Resource Categories (as defined below) that are greater than those allowed by SEA Development Standards and may require removal of more than two SEA Protected Trees that also include heritage trees.

Significant Ecological Area Resource Categories

The SEA Ordinance includes SEA Resource Categories 1 through 5. These categories are defined as follows (Los Angeles County Regional Planning 2020):

- Category 1: FESA and CESA listed plant and wildlife species; CESA candidate species, California Rare Plant Ranks (CRPR) 1A or B, 2A or B, and 3 (CNPS 2025a), critically imperiled natural communities (those that have a Global [G] and/or State [S] ranking of 1) (NatureServe 2023), and water resources
- Category 2: CDFW SSC and their occupied habitat and imperiled natural communities (those that are G2/S2) (NatureServe 2023)
- Category 3: Vulnerable natural communities that are G3/S3 (NatureServe 2023), sensitive local native resources, and oak woodlands
- Category 4: Apparently secure natural communities that are G4/S4 (NatureServe 2023), secure natural communities that are G5/S5 (NatureServe 2023), and CRPR 4 species
- Category 5: All other lands including those "dominated by non-native [vegetation], agricultural fields, hedges, early successional vegetation that has yet to form into a distinct natural community, cleared or disturbed areas, and non-native trees and shrubs."

~~On-Site Preservation for~~Natural Open Space for Significant Ecological Areas Conditional Use Permit

The County's SEA Ordinance and Implementation Guidelines provide for the provision of natural open space, whether on-site or off-site, as mitigation to offset impacts to SEA resources. To evaluate the appropriate location and mechanism for preserved natural open space, staff will first need to determine whether an adequate amount

of suitable habitat is present on site. Projects that do not have an adequate amount of suitable habitat available to protect on site will need to provide any necessary natural open space preservation off site. Mitigation areas that fall short of SEA recommended mitigation ratios. The amount of natural open space may vary, and proposed areas may be given added conservation value should they possess the following characteristics (Los Angeles County Regional Planning 2020):

> "Added value" can be given to proposed natural open space areas if they also contain unique or valuable habitat linkage resources, additional special-status species, surface waters, or sensitive habitats, etc. Proposed open-space with such added-value characteristics may be allowed to be smaller than the area that would typically be required and still be determined to be consistent with the SEA Program goals, subject to the discretion of the Department and a determination of consistency with the SEA Findings by SEATAC.

Table 31, Recommended Preservation Ratios for SEA CUP, lists the recommended preservation ratios for impacts to SEA Resources Categories for projects that require a CUP. These ratios can also be changed based on site specific factors.

Table 31. Recommended Preservation Ratios for SEA CUP

SEA Resources	Preservation Ratio
Category 1 • State or federally listed species and their habitats • California Rare Plant Ranks 1, 2, 3 • Natural communities ranked G1/S1 • Water resources (e.g., wetlands, streams, ponds, lakes, vernal pools, marshes) • Beach and dune	5:1
Category 2 • Natural communities ranked G2/S2 • Species of Special Concern and their habitats	4:1
Category 3 • Natural communities ranked G3/S3 • Oak woodland • Sensitive local native resources • Rock outcrops/rocklands	3:1
Category 4 • Natural communities ranked G4/S4/G5/S5 • California Rare Plant Rank 4 • Non-native grasslands	2:1
Category 5 • Wildlife linkage or corridor or open space buffer	1:1

Source: Los Angeles County Regional Planning 2020.
Note: SEA = Significant Ecological Area; CUP = Conditional Use Permit; G = Global; S = State.

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4 Methods

4.1 Literature/Database Review

The following data sources were reviewed to assist with the assessment of biological resources:

- CDFW California Natural Diversity Database (CNDDB) (CDFW 2025a)
- USFWS Information for Planning and Consultation (USFWS 2025b)
- California Native Plant Society (CNPS) Rare Plant Inventory (CNPS 2025a)
- U.S. Department of Agriculture National Resources Conservation Service Web Soil Survey (USDA 2025a)
- CDFW Biogeographic Information and Observation System (CDFW 2025b)

Prior to conducting field surveys, Dudek reviewed regional CNDDB occurrence data (CDFW 2025a), the Rare Plant Inventory (CNPS 2025a), and USFWS occurrence data (USFWS 2025c) for USGS 7.5-minute Acton and Pacifico Mountain quadrangles and the surrounding 14 quadrangles. In addition, Dudek reviewed the USFWS Information for Planning and Consultation (USFWS 2025b), the National Wetlands Inventory (USFWS 2025a), and the U.S. Department of Agriculture's Natural Resources Conservation Service Web Soil Survey (USDA 2025a) to analyze the occurrence potential of special-status species and jurisdictional aquatic resources that are known to occur or may potentially occur within the study area.

Other literature reviewed included A Manual of California Vegetation, Online Edition (CNPS 2025b); the California Natural Community List (CDFW 2025c); State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2025d); State and Federally Listed Endangered and Threatened Animals of California (CDFW 2025e); and the CDFW California Wildlife Habitat Relationships Life History Accounts and Range Maps (CDFW 2025f).

The following available resources were reviewed to assess the potential for jurisdictional waters: aerial photographs (Google Earth 2025; NETR 2025), the USGS Newhall 7.5-minute topographic quadrangle map (USGS 2018), the National Hydrography Dataset and Watershed Boundary Dataset (USGS 2023), and the USFWS National Wetland Inventory (USFWS 2025a).

4.2 Special-Status Plant and Wildlife Species Assessment

Endangered, rare, or threatened plant species as defined in CEQA Guidelines Section 15380(b) are referred to as "special-status plant species" and, as used in this report, include (1) plant species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of CESA and FESA (CDFW 2025d); and/or (2) plant species with a CRPR of 1 ~~or 2~~through 4 as designated by CNPS (2025a). ~~Species with a CRPR of 3 or 4 generally do not qualify for protection under CEQA; therefore, they are not considered special-status, and impacts to these species are not analyzed in this report.~~ Additionally, the County of Los Angeles considers plant species that are locally important as rare within the county.

Endangered, rare, or threatened wildlife species as defined in CEQA Guidelines Section 15380(b) are referred to as "special-status wildlife species" and, as used in this report, include (1) wildlife species listed, proposed for listing,

or candidates for listing as endangered or threatened recognized in the context of CESA and FESA (CDFW 2025e); (2) California SSC and Watch List species, as designated by CDFW (2025g); and (3) mammals and birds that are fully protected species as described in the California Fish and Game Code, Sections 4700 and 3511 (CDFW 2025h), and (4) Birds of Conservation Concern as designated by USFWS (2021). Additionally, the County of Los Angeles considers wildlife species that are locally important as rare within the county.

The potential for special-status plant species to occur within the Study Area was assessed based on known geographic and elevation ranges as well as habitat and soil conditions that are known to support species occurring in the region. The potential for special-status wildlife species to occur within the Study Area was assessed based on known geographic ranges, the presence/absence of suitable habitat, and other natural history elements that might predict their occurrence. After completion of the reconnaissance surveys, the potential for special-status plant and wildlife species to occur on or near the Project site was summarized according to the following categories:

- Known to occur
- High potential to occur
- Moderate potential to occur
- Low potential to occur
- Not expected to occur

Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided:

- Known to occur: The species has been documented on the property by a reliable source.
- High potential to occur: The species has not been documented on the property but is known to recently occur in the vicinity, and suitable habitat is present.
- Moderate potential to occur: The species has not been documented on the property or in the vicinity, but the site is within the known range of the species, and suitable habitat for the species is present.
- Low potential to occur: The species has not been documented in the vicinity or on the property, but the site is within the known range of the species; however, suitable habitat for the species on site is of low quality.
- Not expected to occur: The property is outside the known geographic or elevational range of the species, and/or the site does not support suitable habitat for the species.

4.3 Field Effort

Surveys for the BESS facility site and Northern Gen-Tie option portions of the Study Area were conducted in 2023. In 2024, surveys were conducted on additional parcels for the Southern Gen-Tie option. Dudek conducted comprehensive surveys for sensitive plants for the BESS and Northern Gen-Tie option portions of the Study Area in the spring of 2023 following an above-average wet season. Dudek conducted surveys for Crotch's bumble bee (*Bombus crotchii*) in the summer of 2024 on the BESS and Northern Gen-Tie option portions of the Study Area. Dudek conducted supplemental Crotch's bumble bee surveys in 2025 for parcels associated with the Southern Gen-Tie option of the Study Area. Table ~~2~~4, Schedule of Surveys, shows the survey type, date, time, conditions, and biologist(s) for each survey.

Table 42. Schedule of Surveys

Date	Focus	Biologists	Time	Survey Conditions
1/6/2023	▪ Vegetation mapping ▪ Jurisdictional delineation	MM, ES	7:30 a.m.–2:55 p.m.	38°F–52°F; 0%–10% cloud cover; 1–8 mph wind
1/11/2023	▪ Vegetation mapping ▪ Jurisdictional delineation	MM, ES	Not recorded	Not recorded
1/12/2023	▪ Vegetation mapping ▪ Jurisdictional delineation	MM, ES	Not recorded	Not recorded
4/28/2023	▪ Rare plants	VG, TP	6:40 a.m.–3:04 p.m.	60°F–80°F; 0% cloud cover; 0–2 mph wind
4/28/2023	▪ Rare plants	TP	6:40 a.m.–2:46 p.m.	57°F–94°F; 0% cloud cover; 0–2 mph wind
5/1/2023	▪ Rare plants	CB, DM, SN, JR	7:30 a.m.–3:25 p.m.	48°F–61°F; 60%–90% cloud cover; 3–5 mph wind
5/2/2023	▪ Rare plants	DM, VG, SN, JR	7:30 a.m.–3:25 p.m.	48°F–70°F; 60%–90% cloud cover; 3–5 mph wind
6/12/2024	▪ Crotch's bumble bee	CA, AC, SL, KN	9:30 a.m.–10:17 a.m.	74°F–80°F; 0% cloud cover; 0–4 mph wind
6/22/2023–7/7/2023	▪ Protected tree mapping	ACa, ST, AP	Not recorded	Not recorded
7/1/2024	▪ Crotch's bumble bee	LB, JE, DS	7:41 a.m.–1:34 p.m.	73°F–90°F; 0% cloud cover; 0–8 mph wind
7/2/2024	▪ Crotch's bumble bee	JE	7:02 a.m.–9:07 a.m.	70°F–81°F; 1–7 mph wind
7/23/2024	▪ Crotch's bumble bee	LB	7:27 a.m.–10:54 a.m.	80°F–95°F; 0%–50% cloud cover; 0–1 mph wind
7/24/2024	▪ Crotch's bumble bee	LB	7:18 a.m.–11:01 a.m.	80°F–95°F; 0% cloud cover; 0–2 mph wind
11/18/2024	▪ Vegetation mapping ▪ Jurisdictional delineation	ES, ZP	8:50 a.m.–12:56 p.m.	49°F–56°F; 0% cloud cover; 5–16 mph wind
11/19/2024	▪ Vegetation mapping ▪ Jurisdictional delineation	TP, RS	9:30 a.m.–3:35 p.m.	53°F–54°F; 0% cloud cover; 1–7 mph wind
2/26/2025	▪ Raptor nest survey	TP, RS	8:28 a.m.–3:30 p.m.	63°F–78°F; 0% cloud cover; 2–15 mph wind
4/16/2025	▪ Crotch's bumble bee	CA, ES	8:21 a.m.–1:08 p.m.	48°F–59°F; 30%–100% cloud cover; 0–3 mph wind
5/21/2025	▪ Crotch's bumble bee	CA, ES	8:21 a.m.–1:08 p.m.	59°F–71°F; 0% cloud cover; 0–1 mph wind
6/5/2025	▪ Rare plants	RSw	7:00 a.m.–12:00 a.m.	84°F; 0% cloud cover; 0–5 mph wind

Table 42. Schedule of Surveys

Date	Focus	Biologists	Time	Survey Conditions
6/30/2025	▪ Crotch's bumble bee	ES, LB	9:16 a.m.–1:30 p.m.	79°F–86°F; 0% cloud cover
8/22/2025	▪ Jurisdictional delineation	ES, RS	Not recorded	Not recorded

Notes: °F = degrees Fahrenheit; mph = miles per hour.
Biologists: AC = Anna Cassidy; ACa = Aida Castro; AP = Ana Pfleeger; CA = Callie Amoaku; CB = Chelsea Bowers-Doerning; DM = Dilip Mahto; DS = Dahlia Serrato; ES = Eilleen Salas; JE = Joshua Elson; JR = Jacob Rogers; KN = Kimberly Narel; LB = Luz Badillo; MM = Max Murray; RS = Ryan Stanley; RSw = Robert Sweet; SL = Sony Leming; SN = Sandra Nash; ST = Sarah Tian; TP = Tracy Park; VG = Valerie Goodwin; ZP = Zarina Pringle.

4.3.1 Vegetation Community and Land Cover Mapping

Vegetation communities and land uses within the Study Area were mapped in the field using Esri Collector, a mobile data collection application, on a digital aerial-based background (Esri 2025). Following completion of the fieldwork, all vegetation linework was finalized using Esri ArcGIS software, and geographic information system coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover type within the Study Area was determined. Vegetation communities within the Study Area were mapped using CDFW's List of Vegetation Alliances and Associations (or California Natural Community List) (CDFW 2025c), which is based on A Manual of California Vegetation, Second Edition (Sawyer et al. 2009) and A Manual of California Vegetation, Online Edition (CNPS 2025b), where feasible, with modifications made to accommodate the lack of conformity of the observed communities (e.g., developed/disturbed land cover types) using Oberbauer et al. (2008) and Jones and Stokes (1993). Vegetation communities were classified based on site factors, descriptions, distribution, and characteristic species present within an area. Each natural community was mapped to the association level, where feasible. Special-status vegetation communities are those communities identified as high priority for inventory in the California Natural Community List (CDFW 2025c).

4.3.2 Aquatic Resource Delineation

Prior to conducting the jurisdictional delineation, USFWS National Wetland Inventory data (USFWS 2025a) was reviewed to determine if the Study Area contained any features mapped by USFWS. Site-specific topographical data was reviewed in conjunction with aerials, both current and historical, to determine the potential presence of non-wetland waters. Current vegetation mapping was reviewed to assess whether the Study Area supported hydrophytic vegetation and potential wetlands. Jurisdictional boundaries were mapped in the field using Esri Collector on a mobile device with sub-meter accuracy. Remote sensing was not used for the delineation.

U.S. Army Corps of Engineers – Potential Waters of the United States

The USACE wetlands delineation was conducted in accordance with the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b) was used to determine the limits of non-wetland waters. Non-wetland waters were delineated on aerial maps in conjunction with Esri Collector on a mobile device. The widths of each non-wetland water were determined in the field according to the OHWM manual. USACE OHWM forms were completed at representative cross-sections of non-wetland waters to capture their characteristics and widths.

Regional Water Quality Control Board – Potential Waters of the United States and Waters of the State

Waters of the state regulated by RWQCB were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2021). As described in these procedures, wetland waters of the state are mapped based on the procedures in the Corps of Engineers Wetlands Delineation Manual (USACE 1987) and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters are mapped at the OHWM based on the procedures defined in A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b).

California Department of Fish and Wildlife – Streams

Potential CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code Section 1602. Streambeds under the jurisdiction of CDFW were delineated using the Cowardin method of waters classification, which defines waters boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (Cowardin et al. 1979).

4.3.3 Rare Plants

The rare plant surveys were guided by the CNPS Botanical Survey Guidelines (CNPS 2001) and CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The biologists walked transects in suitable habitat, spaced approximately 5 meters to 10 meters apart based on the density of vegetative cover, throughout the Study Area. Digital mobile maps and 200-scale topographic plots of vegetation polygons were utilized to navigate the survey area. Plant species encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status. When rare plants were encountered, field personnel recorded data points demarcating the edge of polygon surrounding the population and assessed population numbers using a GPS with sub-meter accuracy.

4.3.4 California Desert Native Plants Act

Dudek biologists conducted a focused desert native plant survey within the survey area (defined as the Project impact footprint and a 150-foot buffer, where accessible). The desert native plant survey was focused on the species subject to the CDNPA. Biologists walked meandering transects spaced approximately 10 meters apart to obtain 100% visual coverage of the survey area. If desert native plants identified under the CDNPA were encountered, field personnel recorded data points using a GPS with sub-meter accuracy (i.e., Trimble® GeoXT) and a data dictionary. The data dictionary included, at a minimum, the species name, the number of individuals, and the botanist collecting the data. The survey methodology and results were documented in a memorandum, with figures illustrating the location of the mapped desert native plants and representative photos of the species.

4.3.5 Crotch's Bumble Bee Surveys

The surveys for Crotch's bumble bee were conducted in accordance with the CDFW survey guidance (CDFW 2023). The survey passes were led by Callie Amoaku, who holds a Memorandum of Understanding and Scientific Collecting Permit to capture Crotch's bumble bee. Dudek conducted five (5) protocol level surveys for Crotch's bumble bee spaced in June and July 2024 (June 12, July 1, July 2, July 23, and July 24), and three (3) in April, May, and June

2025 (April 16, May 21, and June 30). The surveys were split across 2 years because the Project owner did not have access to the entire Project gen-tie area during the 2024 surveys. The 2024 surveys were conducted from June through July, during the Colony Active Period of April through August, which according to CDFW guidelines had the highest detection period, and were spaced between 2 and 4 weeks apart. The three (3) 2025 surveys, which covered the remainder of the Project site and the BESS location, were conducted between April and June, which is during the Colony Active Period. The 2025 surveys were spaced 4 weeks apart to cover a wider period during the Colony Active Period while also meeting recommended guidelines.

The surveys were conducted during optimal conditions when there were sunny to partly sunny skies with temperatures that were greater than 60°F. Suitable habitat within the Study Area was visually surveyed for 1 person-hour per 3 acres of potential habitat. Biologists walked wandering transects through these resources with a goal of observing bumble bees in passing and observing bumble bee nest sites associated with small mammal burrows or other appropriate soil cavities.

4.3.6 Raptor Nest Survey

Surveys for nesting raptors (i.e., eagles, hawks, kites, falcons, and owls) were conducted in early 2025. Dudek biologists conducted a 1-day survey for the Study Area and a 500-foot buffer, with a focus on areas with larger trees and shrubs, residential areas with large ornamental trees, and transmission towers that have potential to support raptor nests.

4.3.7 Protected Tree Census

The portions of the Study Area east of the railroad tracks, south of Carson Mesa Road and the SCE Vincent Substation, and east of the SCE substation are within a County of Los Angeles SEA (County of Los Angeles 2025). The County's SEA Ordinance includes 60 tree species to be protected, including all sizes of California juniper (*Juniperus californica*) (Los Angeles County Regional Planning 2020). Dudek biologists mapped ~~the California juniper~~SEA-protected trees within the SEA portions of the Study Area. Field personnel recorded data points and circumference for each individual plant using a mobile device with sub-meter accuracy. An evaluation of existing health for each California juniper was conducted. Appendix A, Protected Tree Report, has additional details on the census.

5 Results

The cumulative results of the surveys can be found in Appendix B, Biological Constraints Map.

5.1 Vegetation Communities and Land Covers

All plant species encountered during the field reconnaissance surveys and jurisdictional delineations were identified and recorded. Latin and common names for plant species with a CRPR (formerly CNPS List) follow the CNPS Rare Plant Inventory (CNPS 2025a). For plant species without a CRPR, Latin names follow Jepson eFlora (Jepson Flora Project 2025), and common names follow the California Natural Community List (CDFW 2025c) or the U.S. Department of Agriculture Natural Resources Conservation Service PLANTS Database (USDA 2025b). A list of plant species observed in the Study Area during initial surveys is presented in Appendix C, Potential to Occur Tables and Compendia.

Six (6) vegetation communities are considered sensitive by CDFW. The vegetation communities and land cover locations are summarized in Table 53, Vegetation Communities and Land Covers in the Study Area, and illustrated in Figure 4, Vegetation Communities and Land Cover. Vegetation communities within 1,000 feet of the gen-tie route options are expected to be similar to the Study Area because there are no significant changes in topography, geology, or hydrology within that distance.

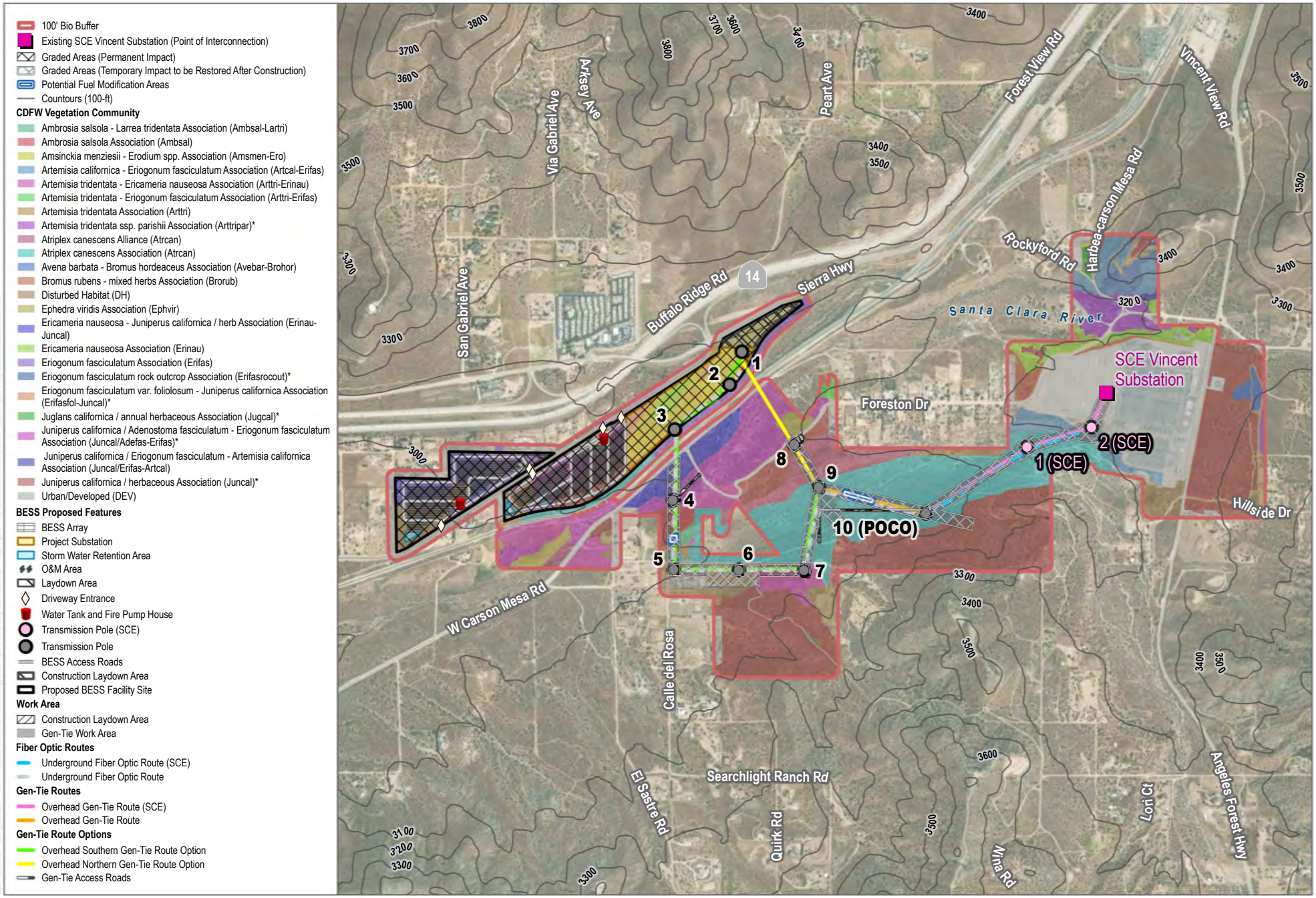
Table 35. Vegetation Communities and Land Covers in the Study Area

Alliance	Association	Acres
Cheesebush – sweetbush scrub	*Ambrosia salsola – Larrea tridentata*	0.82
	Ambrosia salsola Association	2.60
Fiddleneck – phacelia fields	*Amsinckia menziesii – Erodium* spp.	2.21
California sagebrush – (purple sage) scrub	*Artemisia californica – Eriogonum fasciculatum*	12.68
Big sagebrush	*Artemisia tridentata – Ericameria nauseosa*	15.42
	Artemisia tridentata – Eriogonum fasciculatum	3.98
	Artemisia tridentata	0.48
	Artemisia tridentata ssp. *parishii*	7.66
Fourwing saltbush scrub	*Atriplex canescens*	75.57
Mormon tea scrub	*Ephedra viridis*	20.87
Rubber rabbitbrush scrub	*Ericameria nauseosa – Juniperus californica* / herb	18.49
	Ericameria nauseosa	5.38
California buckwheat scrub	*Eriogonum fasciculatum*	4.75
	Eriogonum fasciculatum var. *foliolosum – Juniperus californica*	4.50
California buckwheat – Parish's goldeneye scrub	*Eriogonum fasciculatum* rock outcrop	3.82
California walnut groves	*Juglans californica / annual herbaceous*	0.89
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum – Eriogonum fasciculatum*	31.66
	Juniperus californica / herbaceous	106.67

Table ~~35~~. Vegetation Communities and Land Covers in the Study Area

Alliance	Association	Acres
	Juniperus californica / Eriogonum fasciculatum – Artemisia californica	0.23
	Subtotal:	*317.35*
Naturalized (Non-Native)		
Wild oats and annual brome grasslands	*Avena barbata – Bromus hordeaceus*	2.22
Red brome or Mediterranean grass grasslands	*Bromus rubens* – mixed herbs	2.99
	Subtotal:	*5.21*
Land Cover Types		
Disturbed habitat	Not applicable	19.38
Urban/Developed	Not applicable	71.95
	Subtotal:	*91.33*
	Total:	**413.88**

Notes: Totals may not sum due to rounding.



SOURCE: World Imagery

DUDEK

0 700 1,400 Feet

FIGURE 4

Vegetation Communities and Land Cover

Prairie Song Reliability Project

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Native Vegetation Communities

Vegetation community descriptions are taken from A Manual of California Vegetation, Online Edition (CNPS 2025b).

Cheesebush – Sweetbush Scrub

Cheesebush – sweetbush scrub (*Ambrosia salsola – Bebbia juncea* Shrubland Alliance) has cheesebush (*Ambrosia salsola*), sweetbush (*Bebbia juncea*), woolly brickellbush (*Brickellia incana*), and/or desertsenna (*Senna armata*) as dominant or co-dominant in the shrub canopy with Wiggins' cholla (*Cylindropuntia echinocarpa*), brittlebush (*Encelia farinosa*), California jointfir (*Ephedra californica*), Mojave rabbitbrush (*Ericameria paniculata*), California buckwheat (*Eriogonum fasciculatum*), white ratany (*Krameria grayi*), creosote bush (*Larrea tridentata*), and beavertail pricklypear (*Opuntia basilaris*). This alliance can be found on intermittently flooded channels, arroyos, washes, valleys, flats, and rarely flooded low-gradient deposits. Soils are alluvial, sandy and gravelly, and disturbed desert pavement. Two (2) associations of the alliance were mapped within the Study Area: *Ambrosia salsola – Larrea tridentata* and *Ambrosia salsola* Association. These associations were mapped in the gen-tie portion Study Area.

Fiddleneck – Phacelia Fields

Fiddleneck – phacelia fields (*Amsinckia* [*menziesii*, *tessellata*] – *Phacelia* spp. Herbaceous Alliance) has Menzies' fiddleneck (*Amsinckia menziesii*), bristly fiddleneck (*Amsinckia tessellate)* and/or *Phacelia* spp. or other *Amsinckia* sp. as seasonally co-dominant in the herbaceous layer. Additional local species present include California saltbush (*Atriplex californica*), *Avena* spp., ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), red brome (*Bromus rubens*), exserted Indian paintbrush (*Castilleja exserta*), and *Erodium* spp. Emergent shrubs may be present at low cover. This alliance can be found along upland slopes, broad valleys, ocean bluffs, grazed or recently burned hills, and fallow fields. Soils are well drained and loamy, and they are often subject to high levels of disturbance. One (1) association of the alliance, *Amsinckia menziesii – Erodium* spp., was mapped in the BESS portion of the Study Area.

California Sagebrush – (Purple Sage) Scrub

California sagebrush – (purple sage) scrub (*Artemisia californica* – [*Salvia leucophylla*] Shrubland Alliance) has California sagebrush and/or purple sage (*Salvia leucophylla*) as dominant or co-dominant in the shrub canopy with chamise, coyotebrush (*Baccharis pilularis*), bladderpod spiderflower (*Cleome isomeris*), orange bush monkeyflower (*Diplacus aurantiacus*), California brittlebush (*Encelia californica*), brittlebush, California jointfir, narrowleaf goldenbush (*Ericameria linearifolia*), California buckwheat, and chaparral yucca (*Hesperoyucca whipplei*). This alliance can be found on slopes of variable aspects, but usually steep and rarely flooded, low-gradient deposits along streams. Soils are alluvial or colluvial derived. One (1) association of the alliance, *Artemisia californica – Eriogonum fasciculatum*, was mapped in the gen-tie portion Study Area.

Big Sagebrush

Big sagebrush (*Artemisia tridentata* Alliance) has big sagebrush (*Artemisia tridentata*) as dominant or co-dominant in the shrub canopy with Acton's encelia (*Encelia actoni*), Mormon tea (*Ephedra viridis*), and California buckwheat. Shrub canopy is open to continuous, and emergent trees may be present at low cover. The herbaceous layer is usually sparse to intermittent and grassy. This alliance can be found on plains, alluvial fans, bajadas, pediments, lower slopes, valley bottoms, seasonal and perennial stream channels, and dry washes. Soils are well drained and

consist of loam or sand. Three (3) associations of the alliance were mapped within the Study Area: *Artemisia tridentata* Association, *Artemisia tridentata – Eriogonum fasciculatum* Association, and *Artemisia tridentata – Ericameria nauseosa* Association. These associations were found in the BESS and Southern Gen-tie portions of the Study Area.

Fourwing Saltbush Scrub

Fourwing saltbush scrub (*Atriplex canescens* Shrubland Alliance) has fourwing saltbush (*Atriplex canescens*) as dominant or co-dominant in the shrub canopy with burrobush (*Ambrosia dumosa*), cheesebush, spiny saltbush (*Atriplex confertifolia*), cattle spinach (*Atriplex polycarpa*), Mormon tea, hop sage (*Grayia spinosa*), and creosote bush. Emergent trees may be present at low cover. This alliance can be found along playas, old beaches and shores, lake deposits, dissected alluvial fans, rolling hills, or channel beds. Soils are carbonate rich, alkaline, sandy, or sandy clay loams. One (1) association, *Atriplex canescens*, was mapped in the gen-tie portion Study Area.

Mormon Tea Scrub

Mormon tea scrub (*Ephedra viridis* Shrubland Alliance) has Mormon tea as dominant or co-dominant in the shrub canopy with big sagebrush and rubber rabbitbrush (*Ericameria nauseosa*). Emergent trees may be present at low cover, including California juniper. This alliance can be found along ridges, hills, mountains, and channel beds. Soils are shallow and derived from alluvium, granitic substrate, bedrock, and colluvium. One (1) association, *Ephedra viridis*, was mapped primarily in the BESS portion of the Study Area.

Rubber Rabbitbrush Scrub

Rubber rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance) has rubber rabbitbrush as dominant or co-dominant in the shrub canopy with big sagebrush, *Ephedra* spp., and California buckwheat. Emergent trees may be present at low cover, including California juniper. This alliance can be found along all topographic settings, especially in disturbed settings. Soils are well-drained sands and gravels. Two (2) associations, *Ericameria nauseosa* and *Ericameria nauseosa – Juniperus californica/*herb, were mapped within the BESS and gen-tie portions of the Study Area.

California Buckwheat Scrub

California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance) has California buckwheat or chaparral yucca as dominant or co-dominant in the shrub canopy in cismontane stands with California sagebrush, coyotebrush, orange bush monkeyflower, California brittlebush, brittlebush, and Menzies' goldenbush (*Isocoma menziesii*). Emergent trees may be present at low cover, including California juniper. This alliance can be found in upland slopes, intermittently flooded arroyos, channels and washes, and rarely flooded low-gradient deposits. Soils are coarse, well drained, and moderately acidic to slightly saline. Two (2) associations, *Eriogonum fasciculatum* and *Eriogonum fasciculatum* var. *foliolosum – Juniperus californica*, were mapped in the BESS and north of the Vincent Substation portions of the Study Area.

California Buckwheat – Parish's Goldeneye Scrub

California buckwheat – Parish's goldeneye scrub (*Eriogonum fasciculatum – Viguiera parishii* Shrubland Alliance) has California buckwheat and/or Parish's goldeneye (*Viguiera parishii*) as dominant or co-dominant in the shrub canopy with burrobush, cheesebush, big sagebrush, sweetbush, blackbrush (*Coleogyne ramosissima*), buck-horn

cholla (*Cylindropuntia acanthocarpa*), Wiggins' cholla, brittlebush, and Nevada jointfir (*Ephedra nevadensis*). This alliance can be found in wash and arroyo margins, rocky to bouldery alluvium, canyons, and moderate to steep colluvial slopes and ridges. Soils are well drained and derived from granitic or volcanic rock. One (1) association, *Eriogonum fasciculatum* rock outcrop, was mapped north of the Vincent Substation in the Study Area.

California Walnut Groves

California walnut groves (*Juglans californica* Forest and Woodland Alliance) have Southern California walnut (*Juglans californica*) as dominant or co-dominant in the tree canopy with other native trees. One (1) association, *Juglans californica*/annual herbaceous, was mapped adjacent to residential property (possibly ornamental plantings in origin) north of the Vincent Substation in the Study Area.

California Juniper Woodland

California juniper woodland has California juniper as dominant or co-dominant in the small tree canopy with single-leaf pinyon (*Pinus monophyla*) and blue oak (*Quercus douglasii*). Local shrubs may include big sagebrush *Ephedra* spp., chaparral yucca, and scale broom (*Lepidospartum squamatum*). This alliance can be found along ridges, slopes, valleys, alluvial fans, and valley bottoms. Soils are porous, rocky, coarse, sandy, or silty, and are often very shallow. Three (3) associations, *Juniperus californica*, *Juniperus californica – Adenostoma fasciculatum – Eriogonum fasciculatum*, and *Juniperus californica – Ericameria linearifolia*/annual-perennial herb, were mapped within the BESS and gen-tie portions of the Study Area.

Naturalized (Non-Native) Vegetation Communities

Wild Oats and Annual Brome Grasslands

Wild oats and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance) has slender oat (*Avena barbata*), common wild oat (*Avena fatua*), stiff brome (*Brachypodium distachyon*), greater quaking-grass (*Briza maxima*), ripgut brome, soft brome, and/or wall barley (*Hordeum murinum*) as dominant or co-dominant with other non-natives in the herbaceous layer. Emergent trees and shrubs may be present at low cover. This alliance can be found along all topographic settings in foothills, waste places, rangelands, and openings in woodlands. One (1) association, *Bromus hordeaceus – Amsinckia menziesii – Hordeum murinum*, was mapped adjacent to the Vincent Substation in the Study Area.

Red Brome or Mediterranean Grass Grasslands

Red brome or Mediterranean grass grasslands (*Bromus rubens – Schismus* [*arabicus*, *barbatus*] *Bromus rubens* Alliance) has red brome, Arabian schismus (*Schismus arabicus*), and/or common Mediterranean grass (*Schismus barbatus*) as dominant or co-dominant with other non-natives in the herbaceous layer. Emergent shrubs may be present at low cover. This habitat can be found in all topography settings and soil textures. One (1) association, *Bromus rubens* – mixed herbs, was mapped adjacent to the Vincent Substation in the Study Area.

Disturbed and Developed Land Cover Types

Disturbed Habitat

Although not recognized by the Manual of California Vegetation, Online Edition (CNPS 2025b) or the California Natural Community List (CDFW 2025c), disturbed habitat is described in the Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008). Disturbed habitat is described as areas generally lacking vegetation due to high levels of existing or historical human disturbance that are no longer recognizable as a native or naturalized vegetation association. Areas mapped as disturbed habitat may include unpaved roads, trails, and graded areas (Oberbauer et al. 2008). Vegetation in these areas, if present at all, is usually sparse and dominated by non-native weedy herbaceous species (Oberbauer et al. 2008). Areas mapped as disturbed habitat were found throughout the Study Area and were usually associated with developments or infrastructure.

Urban/Developed

Although not recognized by the Manual of California Vegetation (CNPS 2025b) or the California Natural Community List (CDFW 2025c), the urban/developed mapping unit (or developed land) is described in Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008). This mapping unit describes areas supporting human-made structures, including homes, yards, sidewalks, and other highly modified lands supporting structures associated with dwellings or other permanent structures. Vegetation in these areas, if present at all, is typically associated with ornamental landscaping that has been included in the development footprint (Oberbauer et al. 2008). Most of the developed lands in the Study Area included the large, paved substation and roads.

5.2 Special-Status Plant Species

Appendix C (CDFW 2025a; CNPS 2025a; USFWS 2025b) lists the 80 plant species that are considered endangered, rare, or threatened under CEQA Guidelines Section 15380 and that are known to occur within the 14 USGS 7.5-minute topographic quadrangles that the Study Area is in and the quadrangles that the 10-mile buffer intersects, as well as the species provided by the query of the USFWS' Information for Planning and Consultation. This appendix provides evaluations for each of the special-status species' occurrence in the Study Area vicinity and their potential to occur based on known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. Special-status plant species that have low potential or are not expected to occur are not further analyzed in this document because no direct, indirect, or cumulative impacts are expected based on the negative surveys and evaluation that these species do not have a moderate or high potential to occur on site.

Two (2) sensitive plant species, short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) and golden linanthus (*Leptosiphon aureus*), were mapped during the focused special-status plant surveys in 2023 within the proposed gen-tie route portion of the Study Area, as shown in Figure 5, Biological Survey Results. Two additional special-status plant species, Douglas' fiddleneck (*Amsinckia douglasiana*) and Raven's blazing-star (*Mentzelia ravenii*), were recorded on one day of the special-status plant surveys but were not mapped. Instances of Douglas' fiddleneck did not occur in database queries and was not a focal species based upon the initial habitat assessment for special-status. At the time rare plant surveys were conducted, Raven's blazing-star did not have a CRPR rank. Raven's blazing star received a rank in March 2025 (CNPS 2025a). Finally, two Southern California black walnut, which is a CRPR 4.2 species, were mapped within a residential property but are assumed to have been planted since the habitat in the Study Area is atypical for the species. As such, it will not be analyzed as a special-status species but are included in the protected tree analysis.

Short-Joint Beavertail

Short-joint beavertail has a CRPR of 1B.2, which is defined as plants rare, threatened, or endangered in California and elsewhere, with 20%–80% of occurrences threatened (CNPS 2025a). The species is a cactus that can be found in creosote bush scrub, chaparral, pinyon-juniper woodland, and Joshua tree woodland (CDFW 2025a). Short-joint beavertail was mapped within the proposed gen-tie alignment portion of the Study Area, as shown in Figure 5.

Golden Linanthus

Golden linanthus has a CRPR of 4.2, which is defined as a plant with limited distribution and is moderately threatened in California (CNPS 2025a). The species can be found in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland (CDFW 2025a). The species was mapped within the proposed gen-tie alignment portion of the Study Area, as shown in Figure 5.

Douglas' Fiddleneck

Douglas' fiddleneck has a CRPR of 4.2, which is defined as a plant with limited distribution and is moderately threatened in California (CNPS 2025a). The species can be found in cismontane woodland and valley and foothill grassland (CDFW 2025a). The species was inadvertently not mapped, but it is assumed to have occurred in juniper woodland.

Raven's Blazing-Star

Raven's blazing-star has a CRPR of 1B.3, which is defined as plants rare, threatened, or endangered in California and elsewhere, with less than 20% of occurrences threatened (CNPS 2025a). The species can be found in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. The species was not mapped because it did not have a CRPR at the time of the survey. Raven's blazing-star received a CRPR rank in March 2025 (CNPS 2025a), so it was not considered a special-status plant at the time of the surveys.

5.3 Special-Status Wildlife Species

Appendix C (CDFW 2025a; CNPS 2025a; USFWS 2025b; Los Angeles Audubon 2009) lists the 621 ~~21~~ wildlife species that are considered endangered, rare, or threatened under CEQA Guidelines Section 15380 and that are known to occur within the 14 USGS 7.5-minute topographic quadrangles that the Study Area is in and the quadrangles that the 10-mile buffer intersects, as well as the species provided by the query of the USFWS' Information for Planning and Consultation and Los Angeles County's Sensitive Bird Species. This appendix provides evaluations for each of the special-status species' occurrence in the Study Area vicinity and their potential to occur based on known range and habitat associations. Special-status wildlife species that have low potential or are not expected to occur are not further analyzed in this document because no direct, indirect, or cumulative impacts are expected based on the negative surveys and evaluation that these species do not have a moderate or high potential to occur on site. This includes three species that are included in Los Angeles County's Sensitive Bird Species (Los Angeles Audubon 2009), Scott's oriole (*Icterus parisorum*), vesper sparrow (*Pooecetes gramineus*), and western meadowlark (*Sturnella neglecta*). These three species were not observed during site surveys and have a low potential to occur in the Study Area and are not discussed further.

Two (2) special-status species were observed foraging in the BESS portion of the Study Area, loggerhead shrike (*Lanius ludovicianus*) and greater roadrunner (*Geococcyx californianus*). The following six (6) special-status species

had moderate to high potential to occur in the Study Area: Crotch's bumble bee, California legless lizard (*Anniella* spp.), Blainville's horned lizard (*Phrynosoma blainvillii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Artemisiospiza belli belli*), and mountain lion (*Puma concolor*). One species in the previous list, mountain lion, has a high potential to occur as a transient. The 52 special-status species with a low potential to occur (six [6] species) or species that are not expected to occur (46 species) are excluded from further discussion below, except for western burrowing owl (*Athene cunicularia hypugaea*) and American badger (*Taxidea taxus*). A discussion of western burrowing owl is provided below; however, since burrowing owl is not expected in the Study Area, it is not further analyzed apart from the discussion in this section. Sensitive wildlife species potential within 1,000 feet of the gen-tie route options are expected to be similar to the Study Area because there are no significant changes in topography, geology, or hydrology within that distance.

Crotch's Bumble Bee

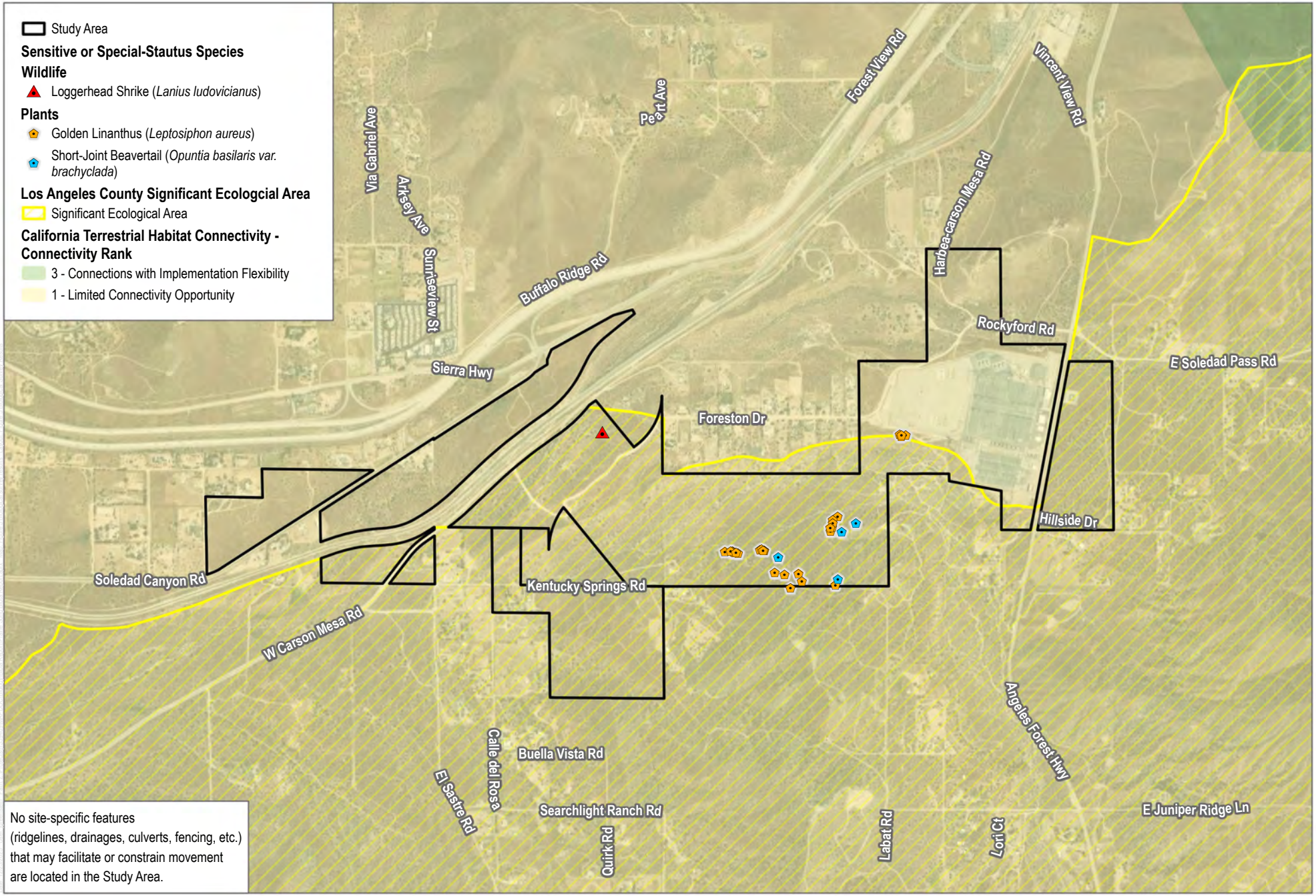
Crotch's bumble bee is a candidate for listing as "Endangered" under CESA and is afforded the protection of CESA while the California Fish and Game Commission decides if listing the species is warranted. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (The Xerces Society 2018). In California, the species inhabits open grassland and scrub habitats (The Xerces Society 2018). The size of Crotch's bumble bee colonies has not been well documented, but like most other species of bumble bees, the species primarily nests underground (The Xerces Society 2018). Bumble bees, including Crotch's bumble bee, are generalist foragers and have been reported visiting a wide variety of flowering plants. Since it has a very short tongue, Crotch's bumble bee is best suited to forage at open flowers with short corollas (The Xerces Society 2018). The plant families most associated with observations or collections of the species from California include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (The Xerces Society 2018). Nectar plants known to be visited by Crotch's bumble bee include the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* (Williams et al. 2014; Xerces Society et al. 2018), but it is assumed flowering plants in other genera could also support foraging by this species.

Crotch's bumble bee could use small mammal burrows within all the vegetation communities in the Study Area and forage on suitable plant species within those communities. However, no Crotch's bumble bee were observed during the surveys that occurred over two (2) survey seasons. No bumble bees of any kind were observed during that period. Floral resources for the species are present but in limited numbers, with the Study Area being dominated by California juniper woodland, fourwing saltbush scrub, and Mormon tea scrub, as shown in Table 3,. Vegetation Communities and Land Covers in the Study Area. Additionally, there are few records for the occurrence of the species or any other bumble bee from the Acton region (CDFW 2025a; iNaturalist 2025; The Xerces Society 2025). Due to the limited foraging opportunities and the few records of bumble bees as a whole in the region, the Project is not expected to involve take of Crotch's bumble bee.

California Legless Lizard

This description provides information for three (3) potential species of legless lizard that may be found in the Study Area: Northern California legless lizard (*Anniella pulchra*), Southern California legless lizard (*Anniella stebbinsi*), and California legless lizard (*Anniella* spp.). This is due to the current uncertainty of the taxonomy of the genus in the Study Area's region (Nafis 2025). All three (3) are considered CDFW SSC. These species are most commonly found in coastal dunes and coastal scrub, but also oak woodland, Joshua tree woodland, and pinyon-juniper woodland (Hansen and Shedd 2025), and are generally found in moist, loose soil (CDFW 2025a). California legless lizard has

moderate potential to occur in the Study Area beneath the larger California junipers due to the expected higher moisture content of the soil.



SOURCE: World Imagery; CDFW 2025; County of Los Angeles 2025

DUDEK

0 750 1,500 Feet

FIGURE 5

Biological Survey Results

Prairie Song Reliability Project

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Blainville's Horned Lizard

Blainville's horned lizard is a CDFW SSC that occurs throughout most of California in locations west of the desert and Cascade-Sierran highlands, in elevations from sea level to around 2,438 meters (8,000 feet) above mean sea level (Hansen and Shedd 2025). Despite a wide-ranging distribution, the species seems to be restricted to localized populations because of its association with loose soils that have a high sand content (Jennings and Hayes 1994). The species is found in a wide variety of vegetation types with the requisite loose sandy soils, including California sagebrush scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest (Klauber 1939; Stebbins 1954). Up to 90% of the diet of Blainville's horned lizard consists of native harvester ants (*Pogonomyrmex* spp.) (Pianka and Parker 1975), and the species does not appear to eat non-native Argentine ants (*Linepithema humile*) (Jennings and Hayes 1994). The species has a moderate potential to occur in a variety of the vegetation communities in the Study Area.

Greater Roadrunner

Observations of greater roadrunner were made in the Study Area but were not mapped since the species is highly mobile and expected to occur throughout the area. The species habitats include areas dominated by creosote, mesquite, chaparral, and tamarisk, as well as grasslands, riparian woodlands, and canyons (Cornell Lab 2025). Greater roadrunner nest sites are 3 to 10 feet or more off the ground, on a horizontal branch or in the crotch of a sturdy bush, cactus, or small tree (Cornell Lab 2025). Greater roadrunner is considered sensitive by the County (Los Angeles Audubon 2009). The species could use the California juniper in the Study Area for nesting and could forage throughout the Study Area.

Loggerhead Shrike

A single observation of loggerhead shrike was made in the Study Area, as shown in Figure 5. The species is a CDFW SSC that occurs throughout the United States, Mexico, and portions of Canada and is widespread at the lower elevations in California (Humple 2008). Preferred habitats for the species are open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or human-made structures (such as the top of chain-link fences or barbed wire) that provide a location to impale prey items for storage or manipulation (Humple 2008). Nest sites are chosen based more on the cover than the particular vegetation species and are usually constructed in a dense shrub or tree well below the crown and are well concealed (Yosef 1996). The species could use the California juniper in the Study Area for nesting and could forage throughout the Study Area.

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow is on the CDFW Watch List and occurs in sparse, mixed chaparral and coastal scrub habitats (CDFW 2025a). The species frequents relatively steep, often rocky hillsides with grass and forb patches and also grassy slopes without shrubs, if rock outcrops are present (CDFW 2025a). The species has a moderate potential to occur on the slopes of the gen-tie portion of the Study Area.

Bell's Sage Sparrow

Bell's sage sparrow is on the CDFW Watch List and occupies semi-open habitats with evenly spaced shrubs that are 1 meters to 2 meters (3.3 feet to 6.6 feet) high (County of Riverside 2025). CDFW still recognizes *A. belli belli*, but the subspecies has been reclassified as its own species Bell's sparrow (*A. belli*), with the other subspecies *A.*

belli nevadensis reclassified as sagebrush sparrow (*A. nevadensis*). For site selection, specific shrub species may be less important than overall vertical structure, habitat patchiness, and vegetation density (Wiens and Rotenberry 1981). At higher elevations in Southern California, Bell's sage sparrow often occurs in big sagebrush (County of Riverside 2008). Sage sparrows seek cover in fairly dense stands in chaparral and scrub habitats during the breeding season. Bell's sage sparrow has a moderate potential to occur in the *Artemisia tridentata* dominant and co-dominant vegetation communities in the Study Area.

Mountain Lion

Mountain lions associated with Southern California and Central Coast populations are designated as a State candidate endangered species. On April 16, 2020, the California Fish and Game Commission voted to designate the Southern California and Central Coast mountain lions as a candidate for listing as an endangered species under CESA. The vote triggered a 1-year review by CDFW to determine whether these mountain lion populations should be formally protected under CESA; however, the listing status of this species is still currently unresolved at the time of this report.

The California mountain lion occurs throughout much of California open space, occurring in or moving through nearly all but the most urbanized settings. This species inhabits a wide range of habitat types where prey items such as mule deer (*Odocoileus hemionus*) and bighorn sheep (*Ovis canadensis*) are present, from interior, arid rocky scrublands, to upper montane coniferous forest, to chaparral, coastal scrub, and woodland habits along the coastal plain.

According to the Mountain Lion Predicted Habitat dataset (CDFW 2025b), the proposed BESS portion of the Study Area consists primarily of high-quality habitat and most of the proposed gen-tie route is within low quality habitat. However, CDFW's Mountain Lion Habitat Suitability dataset has most of the proposed BESS portion of the Study Area and gen-tie alignment as low suitable habitat (Dellinger et al. 2020; CDFW 2025b). As such, the species could occur throughout most of the Project area during home range movement, dispersal, and foraging. The potential to occur is based on habitat suitability: scrub vegetation, presence of mule deer, and proximity to high-quality habitat on large swaths of public lands to the east in the Angeles Nation Forest. However, females keep their young in dens located in rocky terrain or in dense vegetation that provide cover but avoid roads and stay at a distance from human disturbance four (4) times greater (approximately 600 meters) than non-reproductive mountain lions (Center for Biological Diversity and the Mountain Lion Foundation 2019). The Study Area is located adjacent to residential neighborhoods, Sierra Highway, the Southern Pacific Railroad lines, Carson Mesa Road, and SR-14, all of which have associated human presence. As such, females of the species are not expected to establish natal dens in the Study Area.

Western Burrowing Owl

As of October 15, 2024, western burrowing owl is being considered for listing under CESA, and the species is provided with the protection of CESA. Primary habitat requisites for burrowing owl are the presence of burrows for roosting and nesting and vegetation structure that is relatively short and sparse (Center for Biological Diversity et al. 2024). The species was historically abundant throughout southwestern California, including up to the 610-meter (2,001.31 feet) elevation contour in the Transverse Ranges, but have been extirpated from Ventura, western Los Angeles, and Orange Counties and are near extirpation in San Diego County (Center for Biological Diversity et al. 2024). The petition to list the species does not include the Study Area in the breeding range of the species and does not include the Study Area in one (1) of the 16 burrowing owl regions in California (Center for Biological Diversity et al. 2024).

CDFW's range and predicted habitat for burrowing owl does not include the Study Area (CDFW 2025f). There are five (5) CNDDB records of the species within 10 miles that are in the Antelope Valley to the north of the Study Area, with the most recent being 2006 (CDFW 2025a). Citizen science-based databases have only five (5) records within 10 miles that are in the Antelope Valley to the north of the Study Area (eBird 2025; iNaturalist 2025).

The Study Area is dominated by shrub-dominant vegetation communities that have relatively high density. The Study Area elevation ranges from 2,700 feet to 3,500 feet above mean sea level, which is above the known historic occurrences of the species in the Transverse Ranges. California ground squirrel (*Otospermophilus beecheyi*) burrows are present but are sparse, and none of the extensive surveys of the Study Area have identified burrowing owl or diagnostic sign (i.e., pellets, feathers, and extensive whitewash). Based upon the lack of suitable habitat, the Study Area being above the known elevation occurrence of the species in the region, the lack of observations of the species during extensive surveys, and the limited number of records of the species within 10 miles, burrowing owl is not expected in the Study Area and will not be further analyzed.

American Badger

American badger is a CDFW SSC that is an uncommon, permanent resident found throughout most of the state, except in the northern North Coast (CDFW 2025f). Suitable habitat for the species is characterized by herbaceous, shrub, and open stages of most habitats with dry, friable soils (CDFW 2025f). American badger dig burrows in friable soil for dens and frequently reuse old burrows, although some may dig a new den each night, especially in summer (CDFW 2025f). American badger is a highly specialized burrowing mammal that primarily eats burrowing rats, mice, chipmunks, and especially ground squirrels and pocket gophers (CDFW 2025f).

There is one (1) CNDDB record of American badger within 20 miles of the Study Area from 1930 at Lake Los Angeles (CDFW 2025a). There is one (1) 2021 iNaturalist record of the species approximately 8.6 miles to the west near Agua Dulce (iNaturalist 2025). American badger has been determined to have a low potential to occur in the Study Area due to the presence of suitable habitat, but no individuals were observed and no diagnostic signs (i.e., burrows or digs with the species' conspicuous claw marks) were observed during the extensive surveys of the Study Area. As such, the species will not be further analyzed.

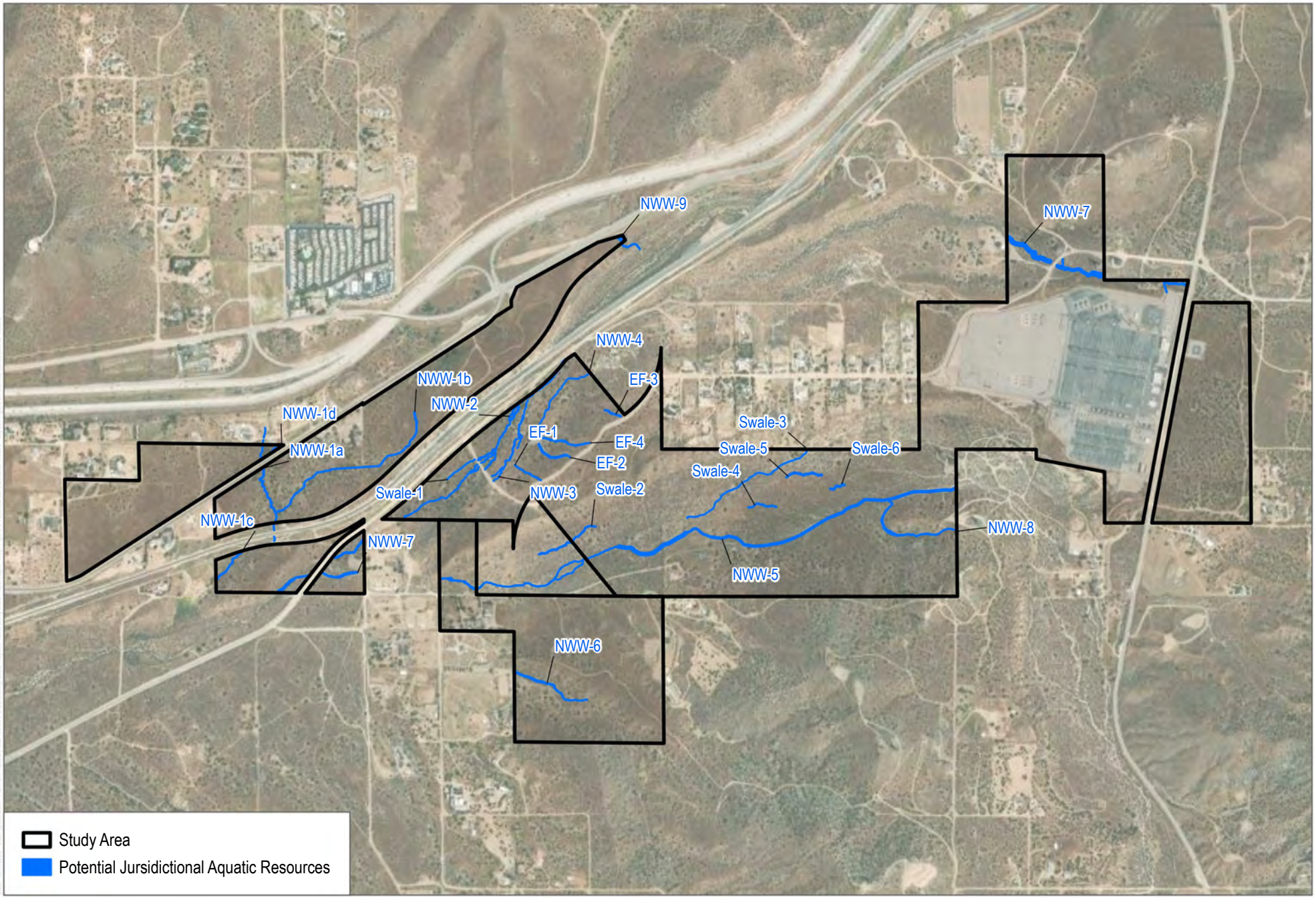
5.4 Potential Jurisdictional Wetlands and Waters

Approximately 3.80 acres of potential jurisdictional waters regulated by RWQCB and CDFW were found within the Study Area, as summarized in Table 46, Summary of Potential Jurisdictional Waters Within the Study Area, and illustrated in Figure 6, Potential Jurisdictional Aquatic Resources. Impacts to these features will require permits from RWQCB and, but for the CEC's jurisdiction, CDFW, before any Project activities take place. Based upon the current definition of waters of the United States per the Clean Water Act, no features were considered to be water of the United States under the jurisdiction of USACE due to the ephemeral-nature of each; however, an Approved Jurisdictional Determination will need to be sought from the agency to document this conclusion.

Table 64. Summary of Potential Jurisdictional Waters Within the Study Area

Jurisdiction	Study Area (acres)
RWQCB/CDFW	
Features	
Non-Wetland Waters	3.34
Swales	0.27
	0.05
Total	3.80

Note: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.



SOURCE: World Imagery

DUDEK

0 500 1,000 Feet

FIGURE 6

Potential Jurisdictional Aquatic Resources

Prairie Song Reliability Project

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5.5 Wildlife Corridors and Habitat Linkages

Wildlife movement corridors have been recognized by federal and state agencies as important habitats worthy of conservation. Wildlife corridors provide migration channels seasonally (i.e., between winter and summer habitats) and provide non-migrant wildlife with the opportunity to move within their home range for food, cover, reproduction, and refuge. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping stones for dispersal.

The Study Area does not overlap with any South Coast Missing Linkages, California Essential Habitat Connectivity Areas, or Natural Landscape Blocks (South Coast Wildlands 2020; CDFW 2014, 2017). Given that the existing vegetation is surrounded on three (3) sides by similar habitats, the Study Area likely provides habitat for local wildlife movement but is not recognized as an important regional wildlife corridor by any state agency or jurisdiction and is of limited linkage value on a landscape scale. Furthermore, although local wildlife may utilize the Study Area for movement, regional connectivity is highly limited by residential neighborhoods, Sierra Highway, the Southern Pacific Railroad lines, Carson Mesa Road, and SR-14 to the west. Thus, the Project is not expected to impose significant barriers to wildlife movement.

5.6 California Desert Native Plant Act Covered Species

Four (4) species covered by the CDNPA were mapped within the Project footprint and a 150-foot buffer (except for adjacent private properties), as shown in Figure 7, California Desert Native Plant Act Covered Species in the Survey Area: chaparral yucca, Wiggins' cholla, beavertail pricklypear (*Opuntia basilaris* var. *basilaris*) and short-joint beavertail. Table 7~~5~~, California Desert Native Plant Act Covered Species in the Survey Area, summarizes the numbers within each area and Figure 7.

Table 7~~5~~. California Desert Native Plant Act Covered Species in the Survey Area

Species	Amount
chaparral yucca	1,118
Wiggins' cholla	644
beavertail pricklypear	94
short-joint beavertail	4
Total	**1,860**

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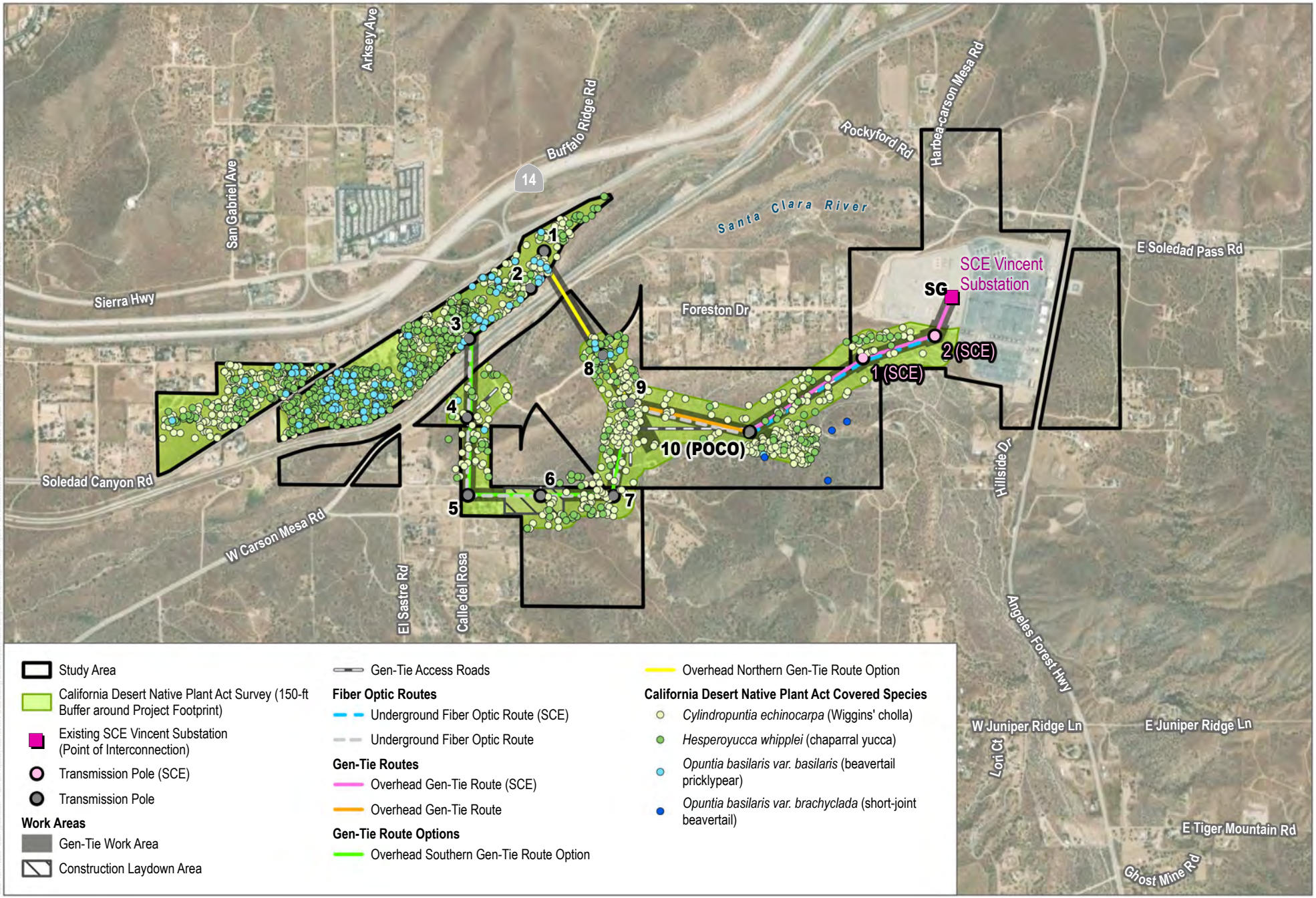

SOURCE: World Imagery

DUDEK

0 700 1,400 Feet

FIGURE 7

California Desert Native Plant Act Covered Species in the Survey Area

Prairie Song Reliability Project

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5.7 Significant Ecological Area Protected Trees

A total of 1,215 trees were documented within the survey area, as shown in Figure 8, Protected Trees, and summarized in Table 86, Summary of Trees in the Study Area. Of these, 1,1913~~4~~ trees are located within the Santa Clara River SEA, and 1,021 of those are classified as protected California junipers. The species is a shrub that is native to California and found only slightly beyond California borders (Calflora 2025). California juniper typically has several trunks and grows up to 13 feet (Jepson Flora Project 2025). Apart from the 1,078 California juniper, nine (9) other protected trees were identified (velvet ash, Southern California black walnut, California sycamore (*Platanus racemosa*), and Fremont cottonwood (*Populus fremontii*), however, no impacts would occur to California sycamore or Fremont cottonwood. Two of the trees, velvet ash and Southern California black walnut, were found within the SEA portion of the Study Area as ornamental trees associated with a residence. These species do not typically occur in the habitats in the Study Area. The protected trees include ~~953~~ 1,005 standard protected trees and 68 heritage trees. The remaining 194 trees consist of 81 located outside the SEA and 113 trees within the SEA that are classified as dead; dead trees are not protected by the County of Los Angeles and do not require mitigation. Table 86 summarizes the protected trees, heritage trees, and non-protected trees that were mapped and evaluated within the Survey Area. Appendix A, Tree Location, of Appendix A of this report provides detailed methodology and locations of all individual trees assessed for the proposed Project. Full results are included in Appendix A.

Table 86. Summary of Trees in the Study Area

Scientific Name	Common Name	Total Number of Protected Trees	Number of Heritage Trees	Total Number of Non-Protected Trees	Total Number of Trees
Juniperus californica	California juniper	1,069 ~~953~~	73 ~~68~~	113	1,182 ~~1,134~~
Fraxinus velutina	velvet ash	1	0	0	1
Juglans californica	Southern California black walnut	2	0	0	2
Platanus racemosa	California sycamore	1	0	0	1
Populus fremontii	Fremont cottonwood	5	0	0	5
	Total	1,078 ~~953~~	73 ~~68~~	113	1,191 ~~1,134~~

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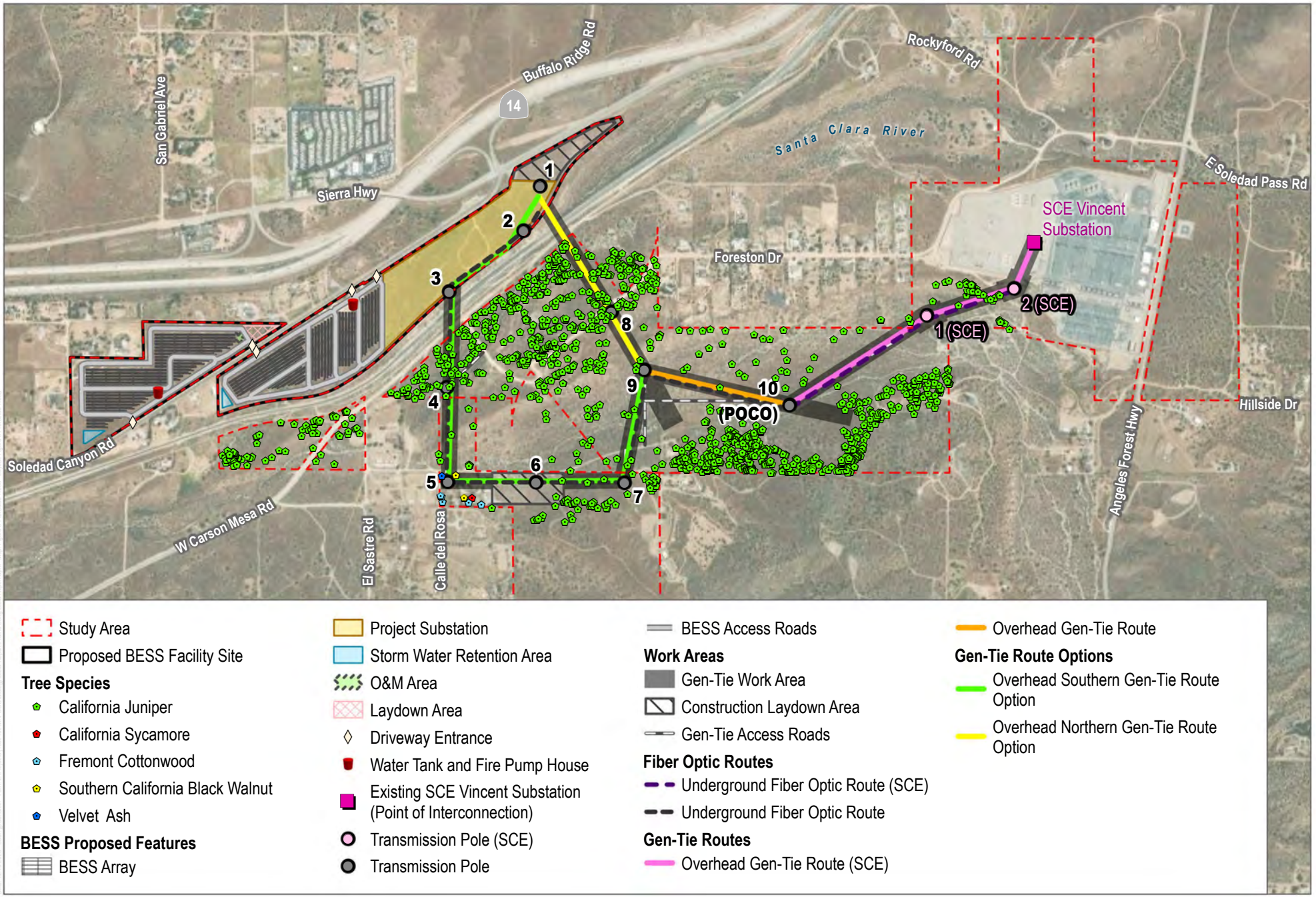


SOURCE: World Imagery

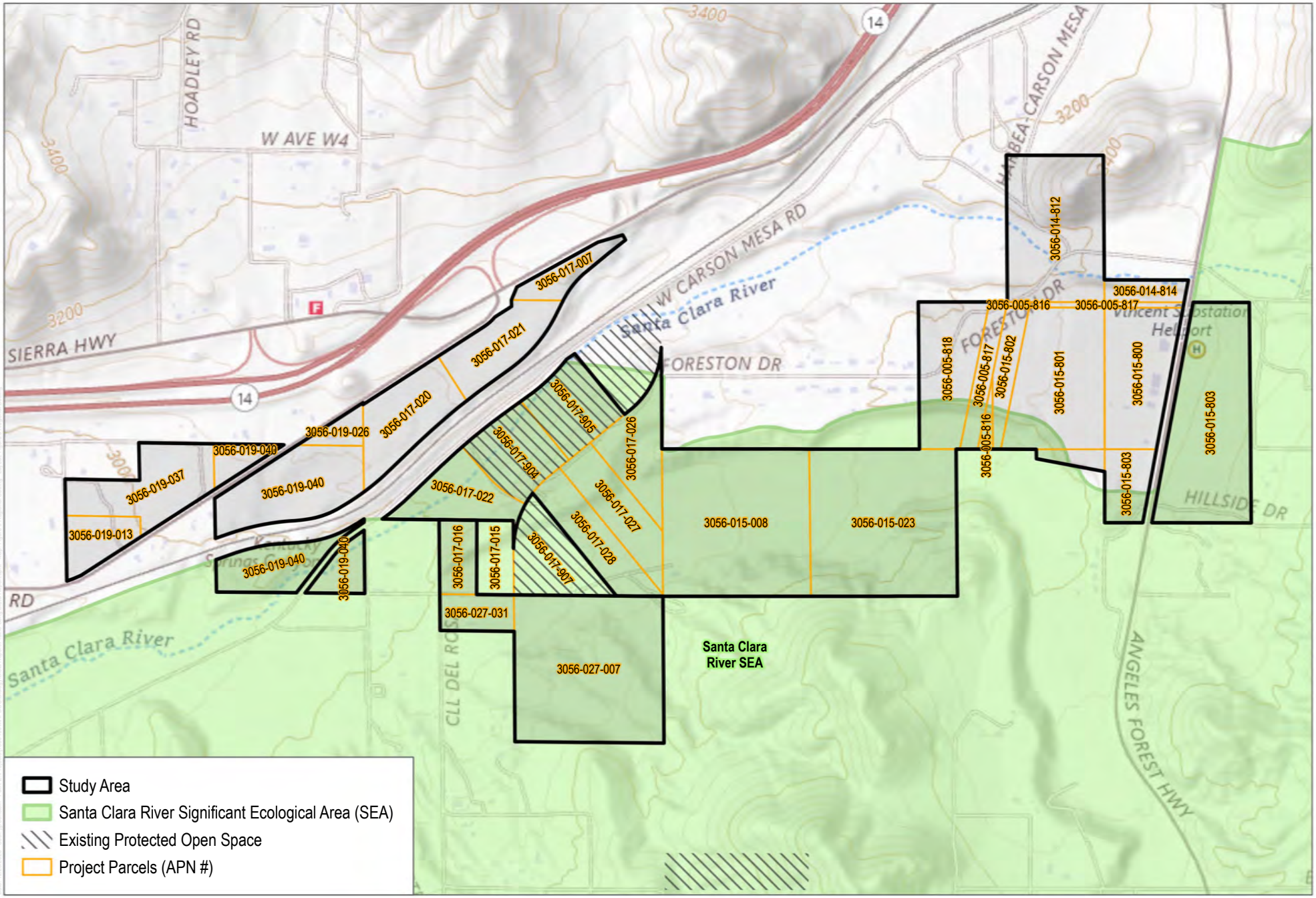
DUDEK

0 550 1,100 Feet

FIGURE 8

Protected Trees

Prairie Song Reliability Project



SOURCE: USGS Topo; CPAD 2025; County of Los Angeles 2025

DUDEK

0 500 1,000 Feet

FIGURE 9

Regional Setting

Prairie Song Reliability Project

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6 Project Impacts to Significant Ecological Area Resources

This chapter addresses the maximum direct and indirect potential impacts to biological resources within the Santa Clara SEA that would result from implementation of the Project.

6.1 Definition of Impacts

Direct. Section 15358 of the CEQA Guidelines defines direct impacts as those that result from the project and "occur at the same time and place." Project-related activities, such as alteration, disturbance, or destruction of sensitive biological resources, are considered a direct impact. Direct impacts for this Project are those associated with the Project, including grading and development of the BESS facility site and gen-tie route.

Indirect. Section 15358 of the CEQA Guidelines defines indirect impacts as impacts that are caused by the project and "are later in time or farther removed in distance, but are still reasonably foreseeable." Indirect impacts associated with the proposed Project include effects to biological or aquatic resources as a result of dust, noise, vibration, or potential erosion.

Permanent. All impacts that result in the irreversible removal of biological resources are considered permanent. Permanent impacts for the proposed Project include the conversion of land for the BESS facility site and associated access facilities.

Temporary. Temporary impacts are considered to have reversible effects on biological resources. Temporary impacts associated with the proposed Project include tension/pulling sites along the gen-tie right of way, and other work associated with temporary access along the gen-tie line.

6.1.1 Explanation of Project Consistency with Significant Ecological Area Conditional Use Permit Compatibility Criteria

As noted in the SEA Ordinance Implementation Guide (Los Angeles County Regional Planning 2020), "When development does not meet the SEA Development Standards, [but for the California Energy Commission's Opt-In Application for Certification process,] a SEA CUP will be required to consider whether the project is compatible with the goals and policies of the SEA Program." Additionally, "The natural open space preservation requirement for SEA CUPs is dependent on the amount of proposed development, degree of impact, type and quality (e.g., intactness) of SEA Resources being disturbed, location, and setting of those SEA Resources, and the project's ability to address the SEA Findings."

The SEA Ordinance Implementation Guide also notes the following (Los Angeles County Regional Planning 2020):

> Development in the SEAs must demonstrate how the proposed development is designed to:
>
> A. Be highly compatible with the SEA Resources, including the preservation of natural open space areas and providing for the long-term maintenance of ecosystem functions;...

B. Avoid or minimize impacts to the SEA Resources and wildlife movement through one or more of the following: avoiding habitat fragmentation, minimizing edge effects, or siting development in the least sensitive location;...

C. Buffer important habitat areas from development by retaining sufficient natural vegetation cover and/or natural open spaces and integrating sensitive design features;...

D. Maintain the ecological and hydrological functions of water bodies, watercourses, and their tributaries;...

E. Ensure that roads, access roads, driveways, and utilities do not conflict with Priority Biological Resources, habitat areas or migratory paths; and...

F. Promote the resiliency of the SEA to the greatest extent possible. For purposes of this finding, SEA resiliency cannot be preserved when the proposed development may cause any of the following:

   a. Significant unmitigated loss of contiguity or connectivity of the SEA;

   b. Significant unmitigated impact to a Priority Biological Resource;

   c. Removal of habitat that is the only known location of a new or rediscovered species; or

   d. Other factors as identified by SEATAC.

6.2 Impacts to Special-Status Plants

Two special-status plant species, Douglas' fiddleneck and Raven's blazing-star, were recorded on one day of the special-status plant surveys but were not mapped. As such the two species could be directly impacted during vegetation removal and grading activities. The loss of individuals during construction could be significant based upon the abundance of each being impacted and will require mitigation. **MM-BIO-1**, Special-Status Plant Species Surveys and seed collection, requires pre-construction surveys for the species to determine if the species are present and the collection of seeds should the species be present. ~~Two (2) special-status plant species, short-joint beavertail and golden linanthus, were mapped in the gen-tie route portion of the Study Area during surveys in 2023. None of the mapped individuals will be directly impacted by the Project.~~ However, some of the individuals of both species are in close proximity to the Project construction limits. Mitigation Measure (MM) BIO-~~2~~21, Demarcation of Disturbance Limits, requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-~~3~~2, Biological Monitoring, requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the flagged limits are adhered to during construction. MM-BIO-~~4~~3, Worker Education Awareness Program (WEAP), requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and Study Area and measures to avoid and minimize impacts to those resources. MM-BIO-5, On-Site Preservation, requires the establishment of a conservation area that will preserve up to approximately ~~175~~ 136 acres of native vegetation communities (the non-impacted acres of the parcels associated with the gen-tie route) within the Study Area parcels associated with the gen-tie routes,~~within the Study Area parcels associated with the gen-tie routes~~, which will preserve individuals and habitat for the species should an ITP for the species be needed. MM-BIO-6, Habitat Mitigation and Monitoring Plan, requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include flora resources that the species could use. Project implementation of MM-BIO-1, MM-BIO-2, MM-BIO-3, MM-BIO-4, MM-BIO-5, and MM-BIO-6 will provide the mitigation for the Project to be compatible with SEA Resources.

Two (2) additional special-status plant species, short-joint beavertail and golden linanthus, were mapped in the gen-tie route portion of the Study Area during surveys in 2023. None of the mapped individuals will be directly impacted by the Project. However, some of the individuals of both species are in close proximity to the Project construction limits. MM-BIO-2 requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-3 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the integrity of any buffers established for active nests. MM-BIO-4 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources. Project implementation of MM-BIO-1 through MM-BIO-5 will reduce potential impacts to less than significant. Impacts will be less than significant with mitigation.

6.3 Impacts to Special-Status Wildlife

For all wildlife, MM-BIO-21 requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-32 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring the integrity of any buffers established for active nests. MM-BIO-43 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources. For Crotch's bumble bee, MM-BIO-74, Crotch's Bumble Bee Avoidance and Minimization Measures, requires pre-construction surveys for the Crotch's bumble nests, with buffers established around active nests until the nests are deemed inactive. For special-status reptiles, MM-BIO-87, Special-Status Wildlife Relocation Plan, will provide a process of clearance surveys and relocation of special-status wildlife into non-impacted portions of the Study Area. For nesting birds, including loggerhead shrike, Southern California rufous-crowned sparrow, and Bell's sage sparrow, MM-BIO-8, Nesting Bird Avoidance, requires pre-construction surveys and buffer establishment for active nests. Project implementation of MM-BIO-21, MM-BIO-32, MM-BIO-34, MM-BIO-47, MM-BIO-87, and MM-BIO-89 will provide the mitigation for the Project to be compatible with SEA Resources.

The Project may impact habitat in the SEA that supports or has the potential to support several special-status species that are candidates for listing under CESA or are CDFW SSC: Crotch's bumble bee, California legless lizard, Blainville's horned lizard, loggerhead shrike, Southern California rufous-crowned sparrow, and mountain lion. Each species is expected to have potentially suitable habitat in all of the native habitats in the Study Area, with the exception of California legless lizard, which is only expected in habitats with California juniper. Indirect impacts to these species will be from the substantial loss of foraging and breeding habitat, as shown in Table 97, Potential Impacts to Special-Status Wildlife Habitat Within the SEA.

Table 97. Potential Impacts to Special-Status Wildlife Habitat Within the SEA

Species	SEA Resource Category[1]	SEA Preservation Ratio[1]	Potential Impacted Habitat (acres)[2]	Restored Temporarily Impacted Habitat (Gross acreage)[2,3]	Needed Conserved Habitat (Gross acreage)[2,4,5,6]
Crotch's bumble bee	1	5:1	29.35[7]	25.91	120.84
California legless lizard	2	4:1	3.59[8]	2.67	11.69
Blainville's horned lizard	2	4:1	29.35[7]	25.91	91.49
loggerhead shrike	2	4:1	29.35[7]	25.91	91.49

Table 97. Potential Impacts to Special-Status Wildlife Habitat Within the SEA

Species	SEA Resource Category[1]	SEA Preservation Ratio[1]	Potential Impacted Habitat (acres)[2]	Restored Temporarily Impacted Habitat (Gross acreage)[2,3]	Needed Conserved Habitat (Gross acreage)[2,4,5,6]
greater roadrunner	3	3:1	29.35[7]	25.91	62.14
mountain lion	1	5:1	33.06[9]	29.26[10]	136.04

Notes: SEA = Significant Ecological Area; gen-tie = generation interconnection; MM = Mitigation Measure.

1 Los Angeles County Regional Planning 2020.
2 Includes impacts from both gen-tie options.
3 Restoration for areas that are temporary impacts (MM-BIO-6).
4 Total impacts multiplied by the ratio and minus the restored habitat (MM-BIO-5).
5 Includes preservation for impacts from both gen-tie options.
6 Acreages are not additive. Conserved habitat needed is overlapping since the species share suitable habitat, so the 136.04 acres for mountain lion will cover all species.
7 Includes all native habitats impacted, as listed in Table 108.
8 Includes all habitats that support California juniper, as listed in Table 810.
9 Includes all native habitats and disturbed habitat impacted, as listed in Table 108.
10 Includes all restoration of native habitats and disturbed habitats.

MM-BIO-5 requires the establishment of a conservation area that will preserve up to approximately 162 136 acres of native vegetation communities within the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include flora resources that the species could use. MM-BIO-21 requires that the limits of construction be clearly marked to avoid impacting biological resources outside those limits. MM-BIO-23 requires full-time monitoring during all vegetation removal and initial grading activities, and the Biological Monitor(s) will be responsible for ensuring that Project construction does not extend beyond Project limits. MM-BIO-34 requires that a program be developed that informs all construction personnel of the sensitive resources that occur on the Project site and measures to avoid and minimize impacts to those resources, which will include a discussion about sensitive vegetation communities. Project implementation of MM-BIO-21, MM-BIO-32, MM-BIO-34, MM-BIO-5, and MM-BIO-6 will provide the mitigation for the Project to be compatible with SEA Resources.

6.4 Impacts to Vegetation Communities

Table 108, Potential Impacts to Vegetation Communities and Land Covers in the Santa Clara River Significant Ecological Area Portion of the Study Area, summarizes the Project's potential direct impacts to vegetation communities and land covers in the Santa Clara River SEA. There will be approximately 3.44 acres of permanent impacts and approximately 25.91 acres of temporary impacts, which includes both gen-tie options. Of the approximate 269.78 acres of vegetation communities in the Study Area, about 240.42 acres (~89%) will be unaffected by Project activities. Potential direct impacts will occur due to removal of vegetation, alteration of soils from grading, and the development of the Project.

Table 108. Potential Impacts to Vegetation Communities and Land Covers in the Santa Clara River Significant Ecological Area Portion of the Study Area

Alliance/Type	Association	NatureServe Global / State Rank[1]	SEA Category[2] [1]	Ratio[21]	Permanent Impacts (gross acreage)[32]	Temporary Impacts (gross acreage)[32]	Total Impacts (gross acreage)[32]
Native Communities							
Cheesebush – sweetbush scrub	*Ambrosia salsola – Larrea tridentata*	NA/NA	4	2:1	–	0.05	0.05
	Ambrosia salsola Association	NA/NA	4	2:1	–	1.57	1.57
California sagebrush – (purple sage) scrub	*Artemisia californica – Eriogonum fasciculatum*	G4/S4	4	2:1	–	1.15	1.15
Big sagebrush	*Artemisia tridentata – Ericameria nauseosa*	NA/NA	4	2:1	0.46	2.21	2.67
	Artemisia tridentata ssp. *parishii*	G2/S2	4	2:1	–	0.20	0.20
Fourwing saltbush scrub	*Atriplex canescens*	G5/NA	4	2:1	2.07	18.09	20.15
Rubber rabbitbrush scrub	*Ericameria nauseosa – Juniperus californica* / herb	NA/NA	4	2:1	–	1.12	1.12
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum – Eriogonum fasciculatum*	NA/NA	3	3:1	0.53	0.35	0.87
	Juniperus californica / herbaceous	NA/NA	3	3:1	0.39	1.16	1.55
Land Covers							
Disturbed Habitat	NA	NA	NA	NA	0.36	3.34	3.70
Urban/ Developed	NA	NA	NA	NA	0.40	1.78	2.18
				Total:	~~3.44~~ 4.20	~~25.91~~ 31.04	~~29.35[4]~~ 35.24[3]

Notes:

[1] Vegetation types listed with global/state ranks 1-3 are considered sensitive; ranks 4-5 are considered secure (CNPS 2023). NA = this vegetation association does not have an assigned NatureServe global or state conservation rank because it either is not considered rare or imperiled, or it has not been formally evaluated or ranked by NatureServe.

2 Significant Ecological Area Ordinance Implementation Guide (Los Angeles County Regional Planning 2020).
32 Includes impacts from both gen-tie options and permanent and temporary impacts.
43 Impacts also include 3.70 acres of Disturbed Habitat and 2.18 acres of Urban/Developed.

As shown in Table 10, the *Artemisia tridentata ssp. parishii* association is the only vegetation community in the Study Area ranked as sensitive under NatureServe's conservation status system. Classified as globally and state imperiled (G2/S2), this community faces a high risk of extinction or elimination (NatureServe 2025). Project activities will result in approximately 0.20 acres of temporary impacts to this vegetation community association.

MM-BIO-5 requires the establishment of a conservation area that will preserve up to approximately ~~175~~ 136 acres of native vegetation communities within the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore the approximately 26 acres of temporarily impacted areas within the conservation area. Project implementation of MM-BIO-5 and MM-BIO-6 will provide the preservation needed for the Project to be compatible with SEA Resources.

6.5 Impacts to Water Resources

The Project will have potential impacts to up to approximately 0.34 acres (approximately 0.01 acres of permanent impacts and 0.33 acres of temporary impacts) of SEA Water Resources (i.e., streams and swales), which includes both gen-tie options. Potential direct impacts will occur due to grading and the development of the Project. Water Resources are to be preserved at 5:1, resulting in the need for 1.70 acres of preservation. MM-BIO-5 requires the establishment of a conservation area that has the potential to preserve up to 2.28 acres of unimpacted Water Resources in the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore an additional approximately 0.33 acres of temporarily impacted Water Resources within the conservation area. Project implementation of MM-BIO-5 and MM-BIO-6 will provide the preservation needed for the Project to be compatible with SEA Resources.

6.6 Impacts to Protected Trees

Direct impacts are associated with tree removal or encroachment within the tree protection zone (TPZ; i.e., canopy dripline plus 5 feet or 15 feet from trunk, whichever is greater) of a protected tree. Specifically, potential tree impacts were determined using geographic information system technology, spatial locations of tree crowns, and a minimum distance of each tree relative to the project impact. A tree is considered removed if it falls within the Project's limits of disturbance or if 30% or more of its TPZ is impacted. A tree is considered encroached upon if less than 30% of its TPZ is affected by project activities, including soil or root disturbance and/or pruning, but the tree is not removed, and a tree is considered preserved if they are not removed and do not experience any TPZ disturbance. Impact totals presented herein are based on proposed disturbance limits, fuel modification zones, and development plans as of the date of this report. The following tree impact findings are organized into two categories: non-heritage tree impacts and heritage tree impacts. Heritage tree status is based on the SEA tree classifications (i.e., riparian, coniferous, upland hardwood) and minimum trunk diameter for protected and heritage trees.

Non-Heritage Tree Impacts (Protected Trees)

Of the 953 protected trees that occur within the Survey Area (non-inclusive of heritage trees), 47 protected non-heritage trees would be directly impacted by the proposed Project's gen-tie line route alignments. The 47 protected

non-heritage tree impacts consist of 38 potential removals (trees are within the grading limits or grading activities affect more than 30% of a TPZ) and nine (9) potential encroachments (trees that are not removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds are anticipated). The nine (9) encroachment trees, as presented in Appendix A, have encroachments that range from 1% to 24%. The remaining 906 protected non-heritage trees would not be directly impacted by the Project. Table 911, Summary of Potential Impacts to SEA Protected Trees (Non-Heritage), provides a summary of the proposed impacts to non-heritage SEA protected trees within and adjacent to the Project.

Table 119. Summary of Potential Impacts to SEA Protected Trees (Non-Heritage)

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Juniperus californica	California juniper	3846	9	4755
Fraxinus velutina	velvet ash	1	0	1
Juglans californica	Southern California black walnut	1	0	1
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
	Total	3848	9	4757

Note: SEA = Significant Ecological Area.

Appendix A presents the locations of the individual trees that would be subject to impacts by the proposed Project.

Heritage Tree Impacts

California juniper, which have naturally thin trunks, must have a height of 20 feet or a canopy spread of 35 feet to be designated as a heritage tree (Los Angeles County Regional Planning 2020). A total of 68 heritage trees are found on the Project site, of which eight (8) could be directly impacted by the Project. The eight (8) heritage tree impacts comprise six (6) potential removals and two (2) potential encroachments. The remaining 60 heritage trees would not be directly impacted by the Project. Table 120, Summary of Potential Impacts to SEA Protected heritage trees, provides a summary of the proposed impacts to SEA protected heritage trees within and adjacent to the Project.

Table 120. Summary of Potential Impacts to SEA Protected Heritage Trees

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Juniperus californica	California juniper	67	21	8
Fraxinus velutina	velvet ash	0	0	0
Juglans californica	Southern California black walnut	0	0	0
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
	Total	67	21	8

Note: SEA = Significant Ecological Area.

Appendix A presents the locations of the individual trees that would be potentially subject to impacts by the proposed Project.

Per the County requirements, the removal of any SEA protected tree requires mitigation in the form of two (2) replacement plantings, and the removal of a heritage tree requires mitigation in the form of 10 replacement plantings. Replacement trees should be seedlings of the same species as those being removed and should be planted in an area of the Project site where there is suitable habitat and where the trees would be able to remain in perpetuity. As such, based on the August 2025 and December 2025 impact analysis of the current design that identified 44 55 potential direct tree removals (six seven [76] heritage trees and 38 48 non-heritage protected trees), the SEA rules may require a minimum of 136 166 mitigation trees to be planted in an area of the Project site where there is suitable habitat and where the trees would be able to remain in perpetuity. This number is based on the potential impacts from both gen-tie options. The final number of impacted trees is expected to be less due to only one gen-tie option being constructed and impact avoidance during final design and field survey. Per the County, Table 131, Summary of Potential Individual Species Replacement Quantities, details the quantity of each species required for planting.

Table 131. Summary of Potential Individual Species Replacement Quantities

Scientific Name	Common Name	Total Impacted	Replacement Ratio	Total Replacement Required
Juniperus californica	California juniper	3846	2:1	7692
Juniperus californica (Heritage Tree)	California juniper	67	10:1	6070
Fraxinus velutina	velvet ash	1	2:1	2[1]
Juglans californica	Southern California black walnut	1	2:1	2[1]
	Total:	4455	N/A	136166

Note: N/A = not applicable. [1] The velvet ash and Southern California black walnut that would be impacted by the Project are ornamental trees associated with a residence and these species do not typically occur in the habitats in the Study Area, so California juniper would be used for the replacement of these species.

MM-BIO-5 requires the establishment of a conservation area. The currently contemplated conservation area has the potential to preserve up to 749 California junipers, however this will be determined upon selection of the gen-tie line route and the design of the project prior to final site plans. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas within the conservation area, including areas mapped as California juniper woodland. Based on current design, up to 136 166 replacement California juniper would be planted and monitored as part of the implementation of MM-BIO-6. Project implementation of MM-BIO-5 and MM-BIO-6 will provide the preservation needed for the Project to be compatible with SEA Resources.

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7 Mitigation Measures

The following mitigation measures shall be implemented for the Project to make the Project compatible with SEA Resources.

MM-BIO-1 Pre-Construction Special-Status Plant Species Survey and Seed Collection.

Prior to the beginning of vegetation removal and grading, CEC-approved biologists shall conduct a focused rare plant survey for Douglas' fiddleneck and Raven's blazing-star during the appropriate blooming period (March through May). Reference site checks will be made for the species to determine if the species are blooming in the Project vicinity. The surveys will conform to CNPS' Botanical Survey Guidelines; CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities; and USFWS' Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants. The results of the surveys will be documented in a report and submitted to the City.

Should any of the species be found at a count of 20 or higher, then construction of the occupied location shall be delayed until the individuals have gone to seed. Seeds shall be collected once the seed has matured, but prior to the seed capsules opening to disperse the seed. Seeds shall be stored in breathable paper bags in a cool, dry, and dark place. The seeds will then be used in the habitat restoration for the Project (see MM-BIO-6).

MM-BIO-~~1~~2 Demarcation of Disturbance Limits

Prior to commencement of ground-disturbing activities for each phase of Project construction, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary high visibility construction fence), as recommended by the California Energy Commission–approved Biological Monitor. All construction activities including equipment staging and maintenance shall be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive vegetation communities outside the limits of work. The flagging shall be maintained throughout construction.

MM-BIO-~~2~~3 Biological Monitoring

Prior to ground-disturbing activities, the applicant shall submit the qualifications of potential Biological Monitor(s) to the California Energy Commission (CEC) for review and approval. The CEC-approved Biological Monitors shall monitor construction activities and ensure compliance with all mitigation measures. The Biological Monitors shall be present on site during all vegetation removal and each day prior to the commencement of grading activities. The Biological Monitors shall be responsible for conducting a pre-construction clearance survey, and any special-status species shall be relocated to areas of the Study Area that will not be impacted by the Project (see MM-BIO-5). Pre-construction clearance surveys shall be conducted prior to construction of each new phase of the development. The Biological Monitors shall monitor to ensure that wildlife does not become entrapped in excavation or trenching areas. Safeguards shall be implemented during daytime periods of non-activity and overnight, such as placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction shall be halted until a Biological Monitor arrives on site and clears the work area (in compliance with all applicable permits and authorizations).

The Biological Monitors shall regularly inspect the Project site as needed after the completion of all grading activities. Monthly spot-check monitoring is anticipated to be required throughout the construction of the Project for those areas that are graded but not yet developed/landscaped. During monthly visits, a Biological Monitor shall address the following: (1) the potential establishment of invasive species and require weed abatement (if necessary) in accordance with Mitigation Measure BIO-10; (2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; and (3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources.

Daily monitoring reports shall be prepared by the Biological Monitors that document the results of any surveys conducted, wildlife relocated, construction activities performed, compliance issues observed, or corrective actions taken during the reporting period. The monitoring reports shall include photos as appropriate and be made available to the CEC at their request. Following the completion of the Project construction, a construction monitoring report will be prepared by the applicant to document compliance with the minimization measures and permit conditions for the Project.

MM-BIO-~~43~~ Worker Education Awareness Program (WEAP)

Prior to the initiation of the initial ground-disturbing activities, all personnel associated with those activities shall attend a worker education awareness program (program) prepared by a qualified biologist approved by the California Energy Commission (CEC). In general, the program shall discuss any potentially occurring sensitive biological resources or species and habitat preference(s), occupied habitat in the area, and life histories; potential construction impacts; protection measures; and Project limits. Legal protections and regulations pertinent to the biological resources that may be present shall also be included in the program. A species and habitat fact sheet shall be developed prior to the training program and distributed at the training program to all contractors, employers, and other personnel involved with the construction of the Project.

After the kickoff meeting, the Project applicant shall notify the CEC-approved qualified biologist in advance if additional contractors are employed during the initial vegetation removal or initial grading activities. A sign-in sheet will be circulated for signatures to all personnel that attend the workers' educational training to confirm that program materials were received and that they understand the information presented.

MM-BIO-5 On-Site Preservation

The applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves up to approximately 136 acres of non-impacted vegetation communities and up to approximately 26 acres of temporary impacted areas that will be restored within the Project boundaries for long-term conservation and management as a natural conservation area. Final acreages proposed for mitigation shall be determined once the generation interconnection line route is finalized. The Conservation Area will be up to approximately 162 acres and located within portions of the Study Area within the Santa Clara River SEA. Table 13, Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved, summarizes the potential vegetation communities and land cover that could be preserved.

Table 13. Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved

Alliance	Association	SEA Category[1]	Acres
Vegetation Communities			
Cheesebush – sweetbush scrub	*Ambrosia salsola – Larrea tridentata*	4	0.82
	Ambrosia salsola Association	4	2.60
Big sagebrush	*Artemisia tridentata – Ericameria nauseosa*	4	14.04
	Artemisia tridentata – Eriogonum fasciculatum	4	0.06
	Artemisia tridentata ssp. *parishii*	4	0.48
Fourwing saltbush scrub	*Atriplex canescens*	4	66.69
Mormon tea scrub	*Ephedra viridis*	4	1.99
Rubber rabbitbrush scrub	*Ericameria nauseosa – Juniperus californica* / herb	4	3.85
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum – Eriogonum fasciculatum*	3	5.60
	Juniperus californica / herbaceous	3	69.90
		Vegetation Communities Subtotal:	*166.03*
Land Cover Types			
Disturbed Habitat	N/A	N/A	6.39
Urban Developed	N/A	N/A	2.76
		Land Cover Types Subtotal:	*9.15*
		Total:	**175.18**

Notes: SEA = Significant Ecological Area; N/A = not applicable.
[1] SEA Ordinance Implementation Guide (Los Angeles County Regional Planning 2020).

A cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record (PAR) to calculate the costs of in-perpetuity land management. The PAR shall take into account all management activities required if an Incidental Take Permit for Crotch's bumble bee (*Bombus crotchii*) is needed for the Project.

The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b).

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the Conservation Area shall be prepared and submitted to the California Energy Commission for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth requirements that shall be

implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area, and may include the following: (1) there shall be no grading or other construction activities within the Conservation Area, except for the proposed habitat enhancement/restoration; (2) no fencing or other barriers to wildlife movement shall be installed; (3) commercial honeybee operations shall not be allowed to use the Conservation Area for storing their apiaries; (4) rodenticides shall be prohibited; (5) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship; (6) at least one (1) annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (7 trash shall be collected and removed, vandalized signs shall be repaired, and trespass impacts shall be rectified; and (8) annual reporting that document the conditions of the Conservation Area shall be provided. Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated.

MM-BIO-6 Habitat Mitigation and Monitoring Plan

Prior to ground-disturbing activities, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area in the Conservation Area and short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) transplant location, and shall outline detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. The HMMP shall be submitted to and approved by the California Energy Commission prior to the onset of Project-related ground-disturbing activities. The acreages allotted for on-site establishment apply to approximately 32 acres within the Conservation Area, including 0.19 acres of ephemeral streams. Up to 166 California juniper (*Juniperus californica*) (depending on actual Project impacts) shall be planted, and individuals of the plant species covered by the California Desert Native Plant Act shall be evaluated to be used in the installation of native plants. The HMMP shall set out measures for habitat restoration/enhancement implementation, including but not limited to the following:

- Identification of proposed plant materials
- Signage in the habitat restoration area
- Schedule for habitat restoration/enhancement work
- Use of pesticides and elimination of non-native vegetation
- Habitat monitoring and reporting
- Performance standards

MM-BIO-~~7~~4 Crotch's Bumble Bee Avoidance and Minimization Measures

If Crotch's bumble bee (*Bombus crotchii*) is still a candidate for listing under the California Endangered Species Act (CESA) or has been listed under CESA at the time of the start of construction of the Project, a pre-construction survey for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of initial ground-disturbing activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). If construction commences outside of that period (November 1 through January 31), surveys would not be warranted since the daughter queens (gynes) disperse following a nest's life cycle and conducting surveys for dormant gynes would not be practical.

The pre-construction survey will be based on recommendations described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The pre-construction survey will be performed by a biologist with expertise in surveying for bumble bees and include at least three (3) survey passes that are not on sequential days or in the same week. The biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence will be apparent after 5 minutes of observation.

During the bumble bee active nesting season (April 1 through August 30), the Biological Monitors approved by the California Energy Commission (CEC) (Mitigation Measure [MM] BIO-2) shall continue to conduct daily sweeps of areas proposed for initial vegetation removal and ground disturbance.

If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 50 feet of the nest or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). The CEC-approved Biological Monitors (MM-BIO-2) shall ensure that the nest buffer is complied with during that period. Outside of the nesting season, it is assumed that no live individuals will be present within the nest as the gynes usually leave by September and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to proposed open space or other suitable areas beyond that have suitable hibernacula resources. Because construction will have occurred in the area outside of the occupied nesting resources, no suitable habitat will be present in the impact area, and it is assumed that new queens will disperse to habitat outside of the construction area.

If the nest resources cannot be avoided, as outlined in this measure, the Project applicant shall consult with CEC and CDFW regarding the need to obtain an Incidental Take Permit. In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project or as otherwise determined through the Incidental Take Permit process. The compensatory habitat mitigation would be accomplished by on site preservation of suitable habitat.

~~**MM-BIO-5 On-Site Preservation**~~

~~The applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves up to approximately 136 acres of non-impacted vegetation communities and up to approximately 26 acres of temporary impacted areas that will be restored within the Project boundaries for long-term conservation and management as a natural conservation area. Final acreages proposed for mitigation shall be determined once the generation interconnection line route is finalized. The Conservation Area will be up to approximately 162 acres and located within portions of the Study Area within the Santa Clara River SEA. Table 12, Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved, summarizes the potential vegetation communities and land cover that could be preserved.~~

Table 12. Unimpacted Vegetation Communities and Land Cover Types in the Santa Clara River Significant Ecological Area Portion of the Study Area That Could Be Conserved

Alliance	Association	SEA Category[1]	Acres
Vegetation Communities			
Cheesebush – sweetbush scrub	*Ambrosia salsola – Larrea tridentata*	4	0.82
	Ambrosia salsola Association	4	2.60
Big sagebrush	*Artemisia tridentata – Ericameria nauseosa*	4	14.04
	Artemisia tridentata – Eriogonum fasciculatum	4	0.06
	Artemisia tridentata ssp. *parishii*	4	0.48
Fourwing saltbush scrub	*Atriplex canescens*	4	66.69
Mormon tea scrub	*Ephedra viridis*	4	1.99
Rubber rabbitbrush scrub	*Ericameria nauseosa – Juniperus californica / herb*	4	3.85
California juniper woodland	*Juniperus californica / Adenostoma fasciculatum – Eriogonum fasciculatum*	3	5.60
	Juniperus californica / herbaceous	3	69.90
		Vegetation Communities Subtotal:	*166.03*
Land Cover Types			
Disturbed Habitat	N/A	N/A	6.39
Urban Developed	N/A	N/A	2.76
		Land Cover Types Subtotal:	*9.15*
		Total:	**175.18**

Notes: SEA = Significant Ecological Area; N/A = not applicable.
[1] SEA Ordinance Implementation Guide (Los Angeles County Regional Planning 2020).

A cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record (PAR) to calculate the costs of in-perpetuity land management. The PAR shall take into account all management activities required if an Incidental Take Permit for Crotch's bumble bee (*Bombus crotchii*) is needed for the Project.

The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b).

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the Conservation Area shall be prepared and submitted to the California Energy Commission for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth requirements that shall be

~~implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area, and may include the following: (1) there shall be no grading or other construction activities within the Conservation Area, except for the proposed habitat enhancement/restoration; (2) no fencing or other barriers to wildlife movement shall be installed; (3) commercial honeybee operations shall not be allowed to use the Conservation Area for storing their apiaries; (4) rodenticides shall be prohibited; (5) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship; (6) at least one (1) annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (7 trash shall be collected and removed, vandalized signs shall be repaired, and trespass impacts shall be rectified; and (8) annual reporting that document the conditions of the Conservation Area shall be provided. Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated.~~

~~MM-BIO-6 Habitat Mitigation and Monitoring Plan~~

~~Prior to ground-disturbing activities, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area in the Conservation Area and short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) transplant location, and shall outline detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. The HMMP shall be submitted to and approved by the California Energy Commission prior to the onset of Project-related ground-disturbing activities. The acreages allotted for on-site establishment apply to approximately 32 acres within the Conservation Area, including 0.19 acres of ephemeral streams. Up to 136 California juniper (*Juniperus californica*) (depending on actual Project impacts) shall be planted, and individuals of the plant species covered by the California Desert Native Plant Act shall be evaluated to be used in the installation of native plants. The HMMP shall set out measures for habitat restoration/enhancement implementation, including but not limited to the following:~~

- ~~Identification of proposed plant materials~~
- ~~Signage in the habitat restoration area~~
- ~~Schedule for habitat restoration/enhancement work~~
- ~~Use of pesticides and elimination of non-native vegetation~~
- ~~Habitat monitoring and reporting~~
- ~~Performance standards~~

MM-BIO-~~8~~7 Special-Status Wildlife Relocation Plan

Prior to commencement of any ground-disturbing activities or the pre-construction staging of equipment on the Project site, the Project applicant shall contract with a biologist approved by the California Energy Commission (CEC) to develop a Pre-Construction Wildlife Survey and Relocation Plan for terrestrial reptiles, including California legless lizard (*Anniella* spp.) and Blainville's horned lizard (*Phrynosoma blainvillii*). The Pre-Construction Wildlife Survey and Relocation Plan shall be submitted to the CEC for review prior to any ground-disturbing activities within potentially occupied habitat.

The plan shall include, at a minimum, the following:

- Protocols for pre-construction surveys to flush out and/or move identified special-status wildlife within the Project site, as feasible
- Relocation to the portions of the Study Area outside of the Project construction limits and within the Conservation Area
- The timing, frequency, and locations where surveys should be conducted
- That surveys shall be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity
- That surveys shall be conducted in all areas anticipated to be subject to vegetation clearing
- The habitat and conditions in the proposed relocation site(s)
- The methods that shall be used for trapping and relocating identified species
- That all equipment used in the effort shall be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens, as noted by Julian and colleagues in their 2020 article in the Herpetological Review, Minimizing the Spread of Herpetofaunal Pathogens in Aquatic Habitats by Decontaminating Construction Equipment
- That any wildlife handling and relocation methodology from the Streambed Alteration Agreement issued by the California Department of Fish and Wildlife (CDFW), if any, shall be incorporated in the Pre-Construction Wildlife Survey and Relocation Plan
- Protocols for documentation/recordation of the species and number of animals relocated
- That relocations shall be logged and made available to the CEC, if requested
- Protocols for notifying CDFW if identified species cannot be relocated
- That attempts at relocation shall be logged and notification shall occur within 24 hours
- The timing and frequency of reports documenting the results of the surveys

MM-BIO-~~9~~8 Nesting Bird Avoidance

Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code consistent with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds and nesting raptors to avoid impacts to nesting birds and raptors.

For the remaining Project activities initiated during the breeding season for nesting birds and nesting raptors, a pre-construction survey shall be conducted by the Biological Monitor (Mitigation Measure BIO-3) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors. If the Biological Monitor does not find any active nests immediately adjacent to the impact areas, the Project activity shall be allowed to proceed.

If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which shall be included in the report(s) documenting the survey(s) that shall be submitted to the California Energy Commission upon completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any

nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitors; and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest or the nest has failed.

MM-BIO-~~10~~9 Invasive Species Prevention Plan

To prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the Project, the following measures shall be implemented:

- The Worker Education Awareness Program (see Mitigation Measure [MM] BIO-3) shall include invasive species prevention measures implemented by the Project.
- All mobile vehicles and construction equipment shall be washed prior to entering the Project site in an upland location where any seed material from invasive species shall be contained and not carried onto the Project site. Logs of the washing shall be submitted monthly to the California Energy Commission (CEC).
- Following the completion of grading activities, for those areas of the Project site that are graded but not yet developed/landscaped, the CEC-approved Biological Monitor shall conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM BIO-2). If abundant invasive species are identified, the Biological Monitor shall inform the construction contractor about the infested area and recommend that the invasive species be removed. The recommendation shall be included in the daily report.
- All vegetative material removed from the Project footprint shall be transported in a covered vehicle and shall be disposed of at a certified disposal site.

MM-BIO-1~~0~~10 Jurisdictional Waters Compensation

Mitigation for up to approximately 0.99 acres of jurisdictional waters shall be implemented through off-site acquisition, such as mitigation bank credits, and/or turnkey projects with mitigation banks (as approved by the California Energy Commission) following the issuance of permits from the U.S. Army Corps of Engineers, and Los Angeles Regional Water Quality Control Board, as applicable, and those agencies' approval of the mitigation bank, and prior to the issuance of the grading permit. A turnkey mitigation project (establishment of the riparian habitat) will be used should credits not be available at the time of the jurisdictional waters permitting.

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8 Significant Ecological Areas Statement of Findings

A Be highly compatible with the SEA Resources, including the preservation of natural open space areas and providing for the long-term maintenance of ecosystem functions

The Santa Clara River SEA covers approximately 45,496 acres, and its overall boundaries extend upstream along several major tributary creeks and where contiguous drainage areas connect to the river basin through open habitat. On a regional basis, the Santa Clara River SEA contains biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution. These include native grassland, coast live oak riparian forest, southern willow scrub, bigcone spruce-canyon oak forest, southern sycamore-alder woodland, southern cottonwood-willow riparian woodland and forest, freshwater marsh, alluvial fan sage scrub, and vernal pool (PCR 2000).

The portions of the Project within the Santa Clara River SEA consist of an approximately 1.1-mile-long or 1.8-mile-long new gen-tie line, depending on the alignment chosen. There will be a maximum of approximately 11 monopole or steel lattice tower structures. The proposed transmission structures were sited to avoid potential impacts to environmental resources. Where possible, the transmission structure access path will utilize existing access roads to minimize new ground disturbance. Fiber optic or other cabling required for the monitoring system typically will be installed in buried conduit within the access road or planned trenching.

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines that create a small footprint within the Santa Clara River SEA following the completion of construction activities. MM-BIO-5 requires the establishment of a conservation area that will preserve up to approximately 162 acres of native vegetation communities within the Study Area parcels associated with the gen-tie routes, which will preserve individuals and habitat for the species. MM-BIO-6 requires the preparation of a restoration plan, its implementation, and a monitoring period to restore temporarily impacted areas and will include flora resources that the species could use.

B Avoid or minimize impacts to the SEA Resources and wildlife movement through one or more of the following:

1 Avoiding habitat fragmentation

The monopole or steel lattice tower structures, access roads, and buried lines create a small footprint within the Santa Clara River SEA following the completion of construction activities, and with the restoration of the temporary impacted areas, the Project is not expected to fragment the habitats with the Study Area. Wildlife is expected to be able to pass through the Project post-construction because the transmission lines are not a barrier to movement.

2 Minimizing edge effects

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines that create a small footprint (approximately 4.12 acres) within the Santa Clara River SEA following the completion of construction activities. The up to approximately 32.25 acres of temporary impacts produced by the Project will be

restored per MM-BIO-6, and MM-BIO-5 will conserve up to approximately 162 acres of natural habitat. During the operation of the Project, maintenance work on the gen-tie and associated infrastructure is expected to be infrequent, so indirect impacts to wildlife are expected to be low.

3 Siting development in the least sensitive location

The Project has been sited to avoid impacts to special-status plants and only have temporary impacts to Water Resources, which will be restored per MM-BIO-6.

C Buffer important habitat areas from development by retaining sufficient natural vegetation cover and/or natural open spaces and integrating sensitive design features

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines that create a small footprint (approximately 4.12 acres) within the Santa Clara River SEA following the completion of construction activities. The up to approximately 32.25 acres of temporary impacts produced by the Project will be restored per MM-BIO-6, and MM-BIO-5 will conserve up to approximately 162 acres of natural habitat.

D Maintain the ecological and hydrological functions of water bodies, watercourses, and their tributaries

The gen-tie portion of the Project will impact up to approximately 0.34 acres of ephemeral Water Resources within the Santa Clara River SEA. The up to approximately 0.33 acres of temporary impacts produced by the Project will be restored per MM-BIO-6, and MM-BIO-5 will conserve up to approximately 2.28 acres of Water Resources.

E Ensure that roads, access roads, driveways, and utilities do not conflict with Priority Biological Resources, habitat areas or migratory paths

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines that create a small footprint (approximately 4.12 acres) within the Santa Clara River SEA following the completion of construction activities. The Project has potential impacts to Priority Biological Resources (SEA Resource Categories 1 through 3) in the form of special-status plants and wildlife, Water Resources, and vegetation communities; however, all such impacts are mitigated in accordance with the SEA Ordinance and CEQA Guidelines.

The Project transmission facilities will be designed consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) where feasible. Transmission facilities will also be evaluated for potential collision reduction devices in accordance with Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC 2012). Based upon the low volume of human activity and the proposed avian-protecting Project design features, potential impacts to wildlife habitat and movement during Project operation are expected to be less than significant.

F Promote the resiliency of the SEA to the greatest extent possible. For purposes of this finding, SEA resiliency cannot be preserved when the proposed development may cause any of the following:

1 Significant unmitigated loss of contiguity or connectivity of the SEA

The gen-tie portion of the Project consists of steel lattice tower structures, access roads, and buried lines. These facilities create a small footprint (approximately 4.12 acres) within the Santa Clara River SEA following the completion of construction activities. The up to approximately 32.25 acres of temporary impacts produced by the Project will be restored per MM-BIO-6, and MM-BIO-5 will conserve up to approximately 162 acres of native vegetation communities within the SEA. These types of features do not create barriers for connectivity or contiguity within the SEA.

2 Significant unmitigated impact to a Priority Biological Resource

The Project has potential impacts to Priority Biological Resources (SEA Resource Categories 1 through 3) in the form of special-status plants and wildlife, Water Resources, and vegetation communities; however, all such potential impacts are mitigated in accordance with the SEA Ordinance and CEQA Guidelines. Ten preservation, avoidance, and minimization measures have been provided as a part of the Project (MM-BIO-1 through MM-BIO-10), including conserving in perpetuity up to approximately 162 of on-site natural open space; requiring pre-construction surveys, planning, and biological monitoring during construction; measures protecting against invasive species establishment and spread; preparation of conservation management plans; nesting bird avoidance; and strategically locating development as close as possible to existing urban uses/infrastructure. These measures serve to preserve and limit potential impacts to Priority Biological Resources. As such, potential impacts to Priority Biological Resources will be reduced to less than significant.

3 Removal of habitat that is the only known location of a new or rediscovered species

No new or rediscovered species are present on the Project site. As such, the Project complies with this finding.

4 Other factors as identified by SEATAC

This finding is not applicable due to the California Energy Commission Opt-In process.

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Appendix A
Protected Tree Report

Significant Ecological Area Protected Tree Report

Prairie Song Reliability Project

~~OCTOBER~~DECEMBER 2025

Prepared for:

PRAIRIE SONG RELIABILITY PROJECT LLC
Contact: Garrett Lehman

Prepared by:

DUDEK

225 South Lake Avenue, Suite M210
Pasadena, California 91101
Contact: ~~Christopher Kallstrand~~Aida Castro

Table of Contents

SECTION **PAGE NO.**

Acronyms and Abbreviations iii

1 Introduction 1

2 Project Location and Description 3
2.1 Project Location 3
2.2 Project Description 3

3 Methods 11
3.1 Tree Inventory 11
3.2 Impact Evaluation 12
3.3 Scope of Work Limitations 13

4 Regulatory Setting 15
4.1 Los Angeles County SEA Ordinance 15
4.1.1 Significant Ecological Area Protected Trees 15
4.1.2 Tree Protection Zone 16

5 Results 17
5.1 Tree Inventory Summary 17
5.2 Tree Impacts 18
5.2.1 Protected Non-heritage Tree Impacts 19
5.2.2 Heritage Tree Impacts 21
5.2.3 Dead Tree Analysis 22

6 Mitigation 24
6.1 Mitigation Requirements 24

7 Tree Protection 26

8 Conclusion 28

9 Arborist's Disclosure 30

10 References Cited 32

TABLES

Table 1. Summary of Trees at the Prairie Song Reliability Project 17
Table 2. Summary of All Protected Tree Impacts (Heritage and Non-heritage) 19
Table 3. Summary of Impacts to Protected Non-heritage Trees 20
Table 4. Summary of Overall Health Ratings for Impacted Protected Non-heritage Trees 21
Table 5. Summary of Impacts to SEA Protected Heritage Trees 21
Table 6. Summary of Overall Health Ratings for Impacted SEA Heritage Trees 22
Table 7. Summary of Dead Trees 22
Table 8. Summary of Individual Species Estimated Replacement Quantities 24

FIGURES

Figure 1 Project Location 5
Figure 2 SEA Location 7
Figure 3 Survey Area 9

APPENDICES

A Tree Locations
B SEA Protected Tree List
C Tree Information Matrix
D Potential Tree Impacts
E Tree Protection Measures

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
County	County of Los Angeles
CUP	Conditional Use Permit
DBH	diameter at breast height
project	Prairie Song Reliability Project
SEA	Significant Ecological Area
TPZ	tree protection zone

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1 Introduction

This Significant Ecological Area (SEA) Protected Tree Report provides an inventory and evaluation of the Protected Trees located within the Santa Clara River Significant Ecological Area (SEA) that are potentially impacted by the Prairie Song Reliability Project (project). This report also provides an analysis of the project's impact on the County of Los Angeles (County) SEA resources as identified within the Los Angeles County SEA Ordinance and SEA Implementation Guide (Implementation Guide; Los Angeles County Planning 2020).

The project will be located on up to approximately 107-acres in unincorporated Los Angeles County (County), California, south of State Route 14 (Figure 1, Project Location). Approximately 35.24 acres associated with the two gen-tie tie line route options are located within the Santa Clara River SEA and are the focus of this report. The remainder of the project is located outside of the SEA and ~~no protected trees were found beyond the limits of the SEA.~~was not included in the arborists' survey area. The field inventory and assessments of tree resources were conducted in June and July 2023 and again in February and December 2025. The focus of Dudek's field evaluations was to identify and inventory all trees in the SEA survey area that are subject to regulation by the Los Angeles County Regional Planning Significant Ecological Areas Ordinance that could be affected by the proposed development. ~~The survey area is depicted on Appendix A.~~ This report meets the requirements of Los Angeles County Regional Planning Significant Ecological Areas Ordinance and includes a discussion of the tree inventory, evaluation, and analysis methods; a summary of findings; identification of anticipated impacts; and tree impact mitigation recommendations.

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2 Project Location and Description

2.1 Project Location

The project would be located in unincorporated Los Angeles County (County), California, south of State Route 14 approximately 3 miles northeast of the center of the unincorporated community of Acton (Figure 1, Project Location). The project is within the U.S. Geological Survey 7.5-minute Acton and Pacifico Mountain Quadrangles, Township 5N, Range 12W, Sections 27, 28, 33 and 34. The battery energy storage system (BESS) site, located outside of the SEA, is comprised of Assessor's Parcel Numbers 3056-017-007, 3056-017-020, 3056-017-021, 3056-019-013, 3056-019-026, 3056-019-037, and 3056-019-040. Development of the battery energy storage system facility would occur on an area of land ~~sandwiched~~located between two existing transportation corridors, the Antelope Valley Freeway (State Route 14) to the north and Los Angeles County Metropolitan Transportation Authority-owned Southern Pacific Railroad lines and Carson Mesa Road to the south, that are approximately 1,200 feet apart.

The project would utilize one of two potential gen-tie routes. Either route would ~~extend~~traverse the SEA by extending south and east from the project substation, crossing Southern Pacific Railroad tracks and West Carson Mesa Road, and then ~~proceed~~proceeding northeast to the Point of Interconnection at the Vincent Substation. The Northern Gen-Tie Route is approximately 1.1 miles long and would be sited on Assessor's Parcel Numbers 3056-015-008, 3056-015-023, 3056-017-026, 3056-017-904, and 3056-017-905, 3056-005-816, 3056-005-817, 3056-005-818, 3056-015-801, and 3056-015-802. The Southern Gen-Tie Route is approximately 1.8 miles long and would be sited on Assessor's Parcel Numbers 3056-015-008, 3056-015-023, 3056-017-016, 3056-017-022, 3056-017-026, 3056-017-027, 3056-017-028, 3056-027-007, 3056-027-031, 3056-005-816, 3056-005-817, 3056-005-818, 3056-015-801, and 3056-015-802. The project would also include three fiber optic telecommunications lines: one would be installed aboveground on the gen-tie structures (along whichever gen-tie route is ultimately selected), and the other two would be installed underground within the Southern Gen-Tie Route corridor. The two other fiber optic lines would be installed underground within the Southern Gen-Tie Route corridor regardless of which Gen-Tie Route corridor option is selected. The project's interconnection facilities would be located within the Southern California Edison Vincent Substation. Land uses in the immediate vicinity of the project include undeveloped and rural lands, multiple high-voltage transmission lines and an electrical substation, paved and rural roads, State Route 14, and railroad lines.

For the purposes of this report, the ~~study~~survey area included ~~the BESS site,~~ parcels comprising the potential gen-tie routes~~,~~ located south and east of the railroad tracks and Carson Mesa Road, and south and west of Southern California Edison's Vincent Substation~~, and other parcels~~ (Survey Area). The Survey Area is depicted on Figure ~~1.~~3 and is within a County of Los Angeles SEA (County of Los Angeles 2025), Los Angeles County Significant Ecological Area (Figure 2, SEA Location). The SEA Ordinance establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights.

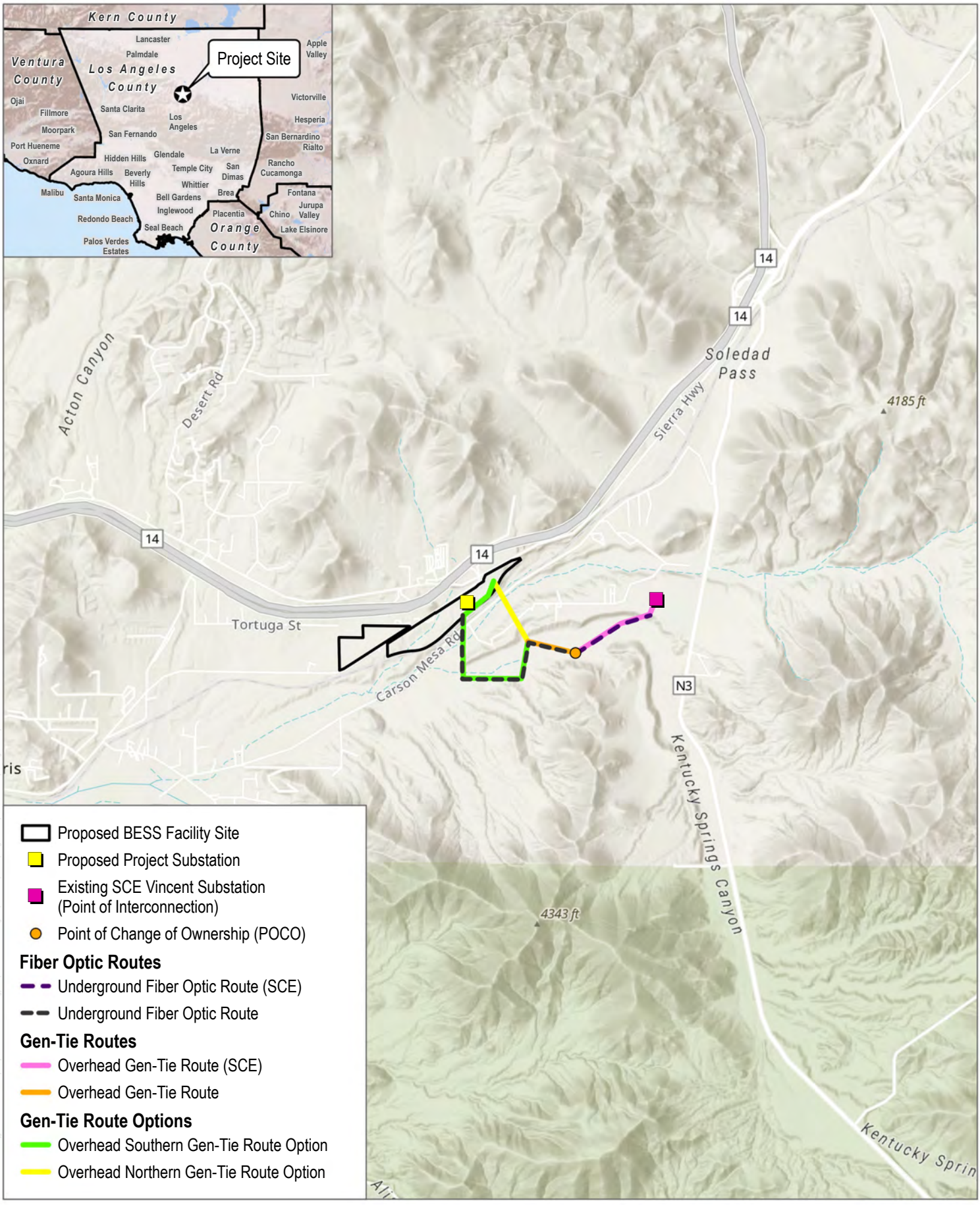
2.2 Project Description

Prairie Song Reliability Project LLC, a Delaware limited liability company (Applicant), a subsidiary of Coval Infrastructure DevCo LLC, a Delaware limited liability company, proposes to construct, operate, and eventually repower or decommission the up to 1,150-megawatt Prairie Song Reliability Project (project) located on up to approximately 107 acres in unincorporated Los Angeles County, of which approximately 35.24 acres associated

with the two gen-tie line routes are located within the Santa Clara River SEA. The primary components of the project include a containerized battery energy storage system facility utilizing lithium-iron phosphate cells, or similar technology, operations and maintenance buildings, an on-site project substation, a 500-kilovolt overhead generation interconnection (gen-tie) transmission line, and interconnection facilities within the existing Southern California Edison-owned and operated Vincent Substation.

Electrical energy would be transferred from the existing power grid to the project for storage and from the project to the power grid when additional electricity is needed. The project would provide additional capacity to the electrical grid to assist with serving load during periods of peak demand by charging when demand is low and discharging when demand is high. This operating principle increases the integration of additional intermittent renewable energy, such as wind and solar, in California's energy mix and reduces the need to operate natural gas power plants. The project would also serve as an additional local/regional capacity resource that would enhance grid reliability, particularly to the Los Angeles Basin local reliability area and may allow for the deferral or avoidance of regional transmission facilities.

The project would be remotely operated and monitored year-round as well as supported by on-site operations and maintenance staff 7 days a week. The project would be available to receive or deliver energy 24 hours a day and 365 days a year. During the operational life of the project, qualified technicians would inspect the project facilities and conduct necessary maintenance to ensure reliable and safe operational readiness.



SOURCE: World Topographic

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0 1,500 3,000 Feet

FIGURE 1

Project Location

Prairie Song Reliability Project

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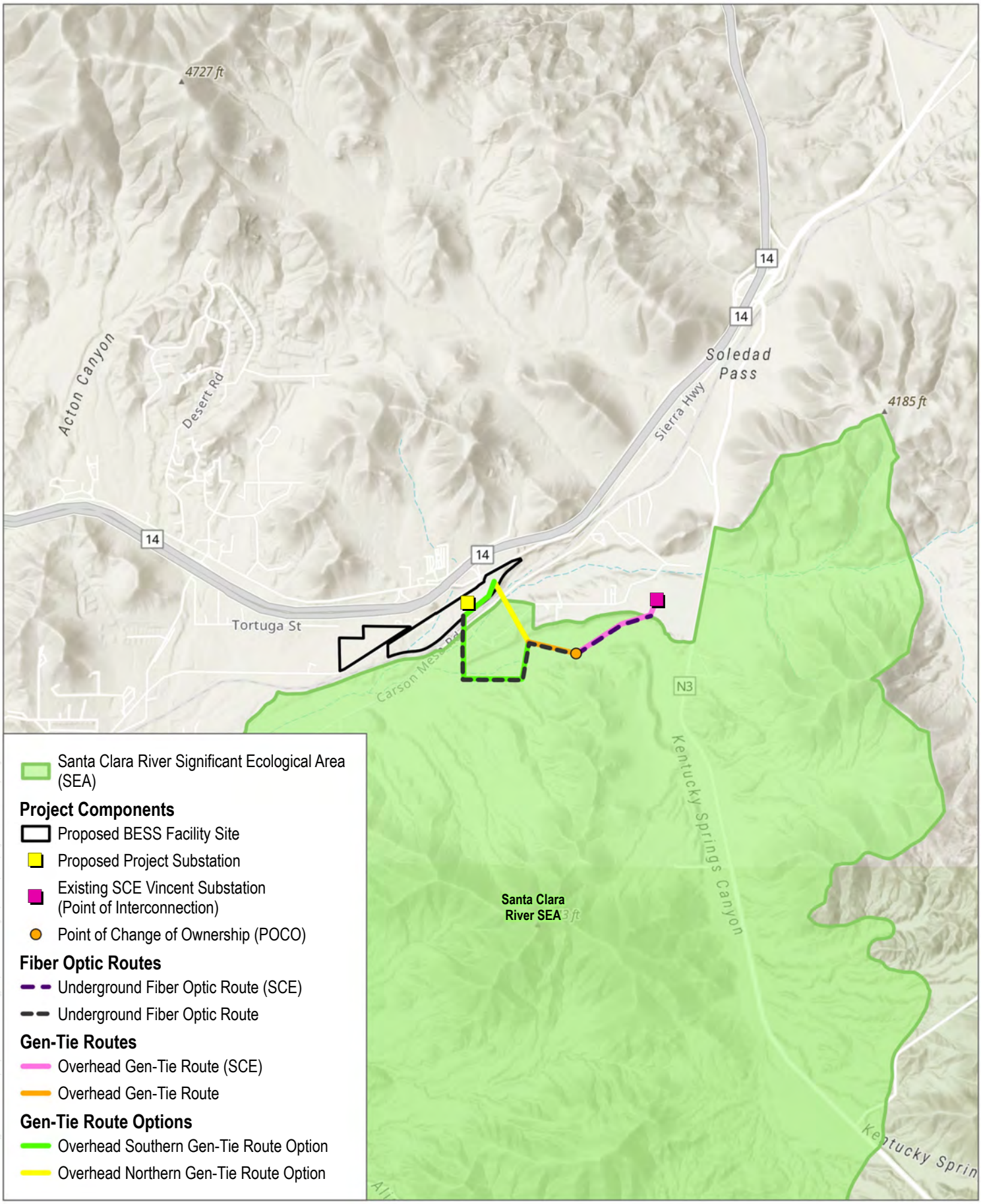

SOURCE: World Topographic; Los Angeles County

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FIGURE 2

SEA Location

Prairie Song Reliability Project

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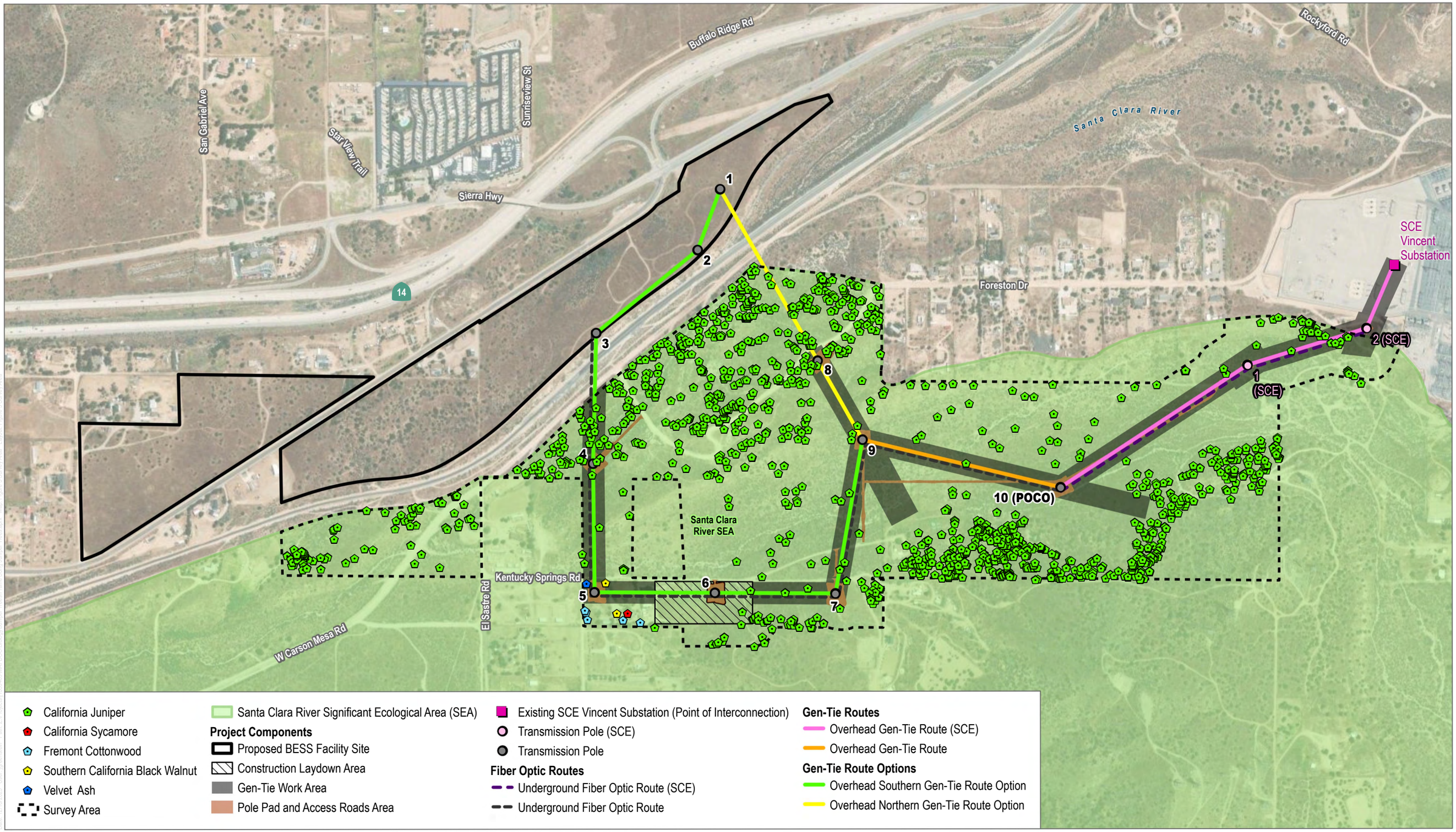

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

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FIGURE 3

Survey Area

Prairie Song Reliability Project

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3 Methods

3.1 Tree Inventory

Dudek's International Society of Arboriculture Certified Arborists Aida Castro, Sarah Tian, Jannette Ly, and Anna Pfleeger performed a comprehensive tree inventory update in June and July 2023. As a follow-up survey, International Society of Arboriculture Certified Arborists, Aida Castro and Ryan Allen conducted a supplemental survey on February 21, 2025. ~~The~~ An additional survey was conducted by International Society of Arboriculture Certified Arborists Aida Castro and Katrina Burritt on December 3rd and 4th, 2025 to include additional areas within the SEA and to confirm that no blue elderberry (*Sambucus nigra ssp. Caerulea*) occurs within the Survey Area~~, for the purposes of the tree inventory, encompassed the approximately 107-acre potential project area. However, for the purposes of~~ . As previously mentioned, the Survey Area used in this report~~,~~ only ~~those trees~~ includes areas associated with the two gen-tie tie line route options that are located ~~in~~within the Santa Clara River SEA ~~and subject to the SEA Program are included. It should be noted that no protected trees,~~. The remainder of the project area outside of the SEA~~, were identified.~~ was excluded from the tree Survey Area.

The location of the Survey Area, including the SEA is depicted in ~~Appendix A, Tree Location~~Figure 3, Survey Area. During the survey, Dudek mapped and evaluated all trees that met the minimum requirements for protection under the Los Angeles County SEA Ordinance within the Survey Area.

~~Specifically, the Survey Area falls within the Santa Clara River SEA. As such, under the Santa Clara River SEA, the minimum size at which native tree species become protected within the project area SEA is as follows:~~

- ~~Riparian species and trees listed as rare by California Native Plant Society ("CNPS") are generally protected at 3-inch diameter at breast height (DBH) for single trunk and 4-inch DBH for multi-trunk,~~
- ~~Non-riparian native tree species, as detailed in Appendix B, SEA Protected Tree List, are generally protected at 6-inch DBH for single trunk and 8-inch DBH of the combined diameter of the two largest tree trunks for multi-trunk,~~
- ~~All California junipers (*Juniperus californica*) regardless of diameter are protected.~~

~~Additionally, according to the SEA Protected trees are considered heritage trees if they meet the following criteria:~~

- ~~Riparian species and trees listed as rare by California Native Plant Society ("CNPS") are generally considered heritage trees at 18-inch DBH for single trunk and 28-inch DBH for multi-trunk,~~
- ~~Non-riparian native tree species, as detailed in Appendix B, SEA Protected Tree List, are generally protected at 36-inch DBH for single trunk and 56-inch DBH for multi-trunk,~~
- ~~California junipers with a canopy spread of 35" or greater are considered heritage trees.~~

~~Detailed requirements~~Requirements for individual and multi-stem diameter thresholds that determine protection status for native tree species within the Santa Clara River SEA are ~~provided~~discussed in section 4 of this report and further detailed in Appendix B, SEA Protected Tree List.

Per the Los Angeles County SEA Ordinance, trunk diameter measurements were taken at 54 inches above the natural grade. In cases where the trunk of a tree split into multiple stems at approximately 54 inches above natural grade, the measurement was made at the location that best represented the trunk's diameter.

Tree attribute data collected during the field survey included species, height, canopy width, number of stems, trunk diameter, and general health and structure conditions. Trunk diameters were measured using a diameter tape, which provides adjusted numbers for diameter measurements when wrapping the tape around the circumference of a tree trunk. Diameter measurements were collected using standard protocol described by the Council of Tree and Landscape Appraisers in its Guide for Plant Appraisal (CTLA 2020), published by the International Society of Arboriculture, and in accordance with guidance given in the County's SEA Ordinance.

Pursuant to the Guide for Plant Appraisal (CTLA 2020), tree health was evaluated with respect to five distinct tree components: roots, trunk, scaffold branches, small branches, and foliage. Health and structure were graded as good, good/fair, fair, fair/poor, or poor. Good condition trees exhibit acceptable vigor, healthy foliage, minor if any structural issues, and no apparent maladies. Fair condition trees are typical, with few maladies and moderate structural issues, and may exhibit less vigor in foliage and new growth. Trees assigned a poor condition rating exhibit significant health or structural problems or damage.

Each regulated tree was mapped using Apple iPhones or iPads paired with external Bluetooth antennas (EOS Arrow 100 and Trimble R1) to enhance positional accuracy. Tree location data was collected and managed in the field using ArcGIS Field Maps. Each tree was assigned a unique digital identifier, which corresponds to the mapped locations in Appendix A, Tree Location, and the associated attributes in Appendix C, Tree Information Matrix.

Upon completion of field data collection and mapping, raw data was post-processed and individual tree location data was compiled and updated utilizing geographic information system technology. The digital tree locations were linked to individual tree identification numbers and associated tree attribute data. These data were then analyzed to evaluate the protection status of each tree (~~protected~~Protected or heritage) and each tree's impact status, as presented in this report. For SEA Protected Trees with multiple trunks, the combined diameter at breast height (DBH) of the two largest trunks was calculated to determine the aggregate DBH for such trees. DBH was used to characterize individual trees as being a Protected or ~~Heritage~~heritage Tree under the SEA guidelines. Those specific measurements are provided in Appendix B, SEA Protected Tree List. Additional details regarding protection status (~~protected~~Protected or heritage) are discussed in detail in Section 4, Regulatory Setting.

3.2 Impact Evaluation

There is wide variation in tolerance to construction impacts among tree species, and the response of an individual tree to impacts also varies with age and condition. Impacts assessed for this project include trees with protected zones within the proposed improvement and disturbance areas, as defined in the project's site plan ~~(dated August 2023).~~as of the date of this report. Per the County Code, which establishes minimum setbacks for SEA Protected Trees, the tree protection zone (TPZ) is defined as the area that extends 5 feet out from the dripline of the Protected Tree or 15 feet from the trunk, whichever distance is greater. For the tree impact analysis conducted in ~~August~~December 2025, Dudek applied the SEA Protected Tree Ordinance criteria. Tree removal is anticipated when proposed grading activities affect more than 30% of a TPZ. Encroachment is expected when less than 30% of the TPZ is disturbed, such as through soil or root disruption, or when pruning is required. To determine impact designations, Dudek arborists used the County's definition of direct impact, which includes tree removal, root disturbance, soil excavation and compaction,

grade changes, canopy loss, and trunk damage. Based on these criteria, project-related impacts are classified as either direct impacts (removal or encroachment) or no impact (trees preserved without disturbance).

3.3 Scope of Work Limitations

No root crown excavations or investigations or internal probing were performed during the tree assessment. Therefore, the presence or absence of internal decay or other hidden inferiorities in individual trees could not be confirmed. It is recommended that any large tree proposed for preservation or relocation be thoroughly inspected for internal and subterranean decay by a qualified arborist before finalizing a preservation or relocation plan.

Data for trees located on private property was visually estimated.

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4 Regulatory Setting

The following section summarizes the relevant policies regulating tree impacts and removals associated with the project.

4.1 Los Angeles County SEA Ordinance

~~The~~The Survey Area encompassing the two gen-tie line routes under consideration by the project are in the Santa Clara River SEA~~, while the remainder of the project site is located outside of the Santa Clara River SEA~~. The following section summarizes portions of the ordinance that are specifically pertinent to this tree report (Los Angeles County Regional Planning 2020).

4.1.1 Significant Ecological Area Protected Trees

Chapter 3 (SEA Protected Trees) of the Los Angeles County SEA Ordinance Implementation Guide (County of Los Angeles 2020) describes tree protection regulations. Protected Trees are designated by species and trunk diameter of a minimum listed size specific to each SEA. The minimum size at which native tree species become protected within the project area SEA is as follows:

- Riparian species and trees listed as rare by California Native Plant Society ("CNPS") are generally protected at 3-inch DBH for single trunk and 4-inch DBH for multi-trunk,
- Non-riparian native tree species, as detailed in Appendix B, SEA Protected Tree List, are generally protected at 6-inch DBH for single trunk and 8-inch DBH for multi-trunk,
- All California junipers (*Juniperus californica*) regardless of diameter are protected.

Additionally, according to ~~the~~ SEA, Protected trees are considered heritage trees if they meet the following criteria:

- Riparian species and trees listed as rare by California Native Plant Society ("CNPS") are generally considered heritage trees at 18-inch DBH for single trunk and 28-inch DBH for multi-trunk,
- Non-riparian native tree species, as detailed in Appendix B, SEA Protected Tree List, are generally protected at 36-inch DBH for single trunk and 56-inch DBH for multi-trunk,
- California junipers with a canopy spread of ~~35"~~35' or greater are considered heritage trees.

Detailed requirements for individual and multi-stem diameter thresholds that determine protection status for native tree species within the Santa Clara River SEA are provided in Appendix B, SEA Protected Tree List

As discussed in the following sections, because the number of project-related impacts is greater than two trees, the project ~~would require~~requires a discretionary SEA Conditional Use Permit (CUP) review but for the California Energy Commission's Opt-In Application for Certification process, which is currently ongoing. Furthermore, mitigation and monitoring requirements for SEA CUPs should meet or exceed the mitigation and monitoring requirements of a Protected Tree permit.

4.1.2 Tree Protection Zone

Chapter 3 of the Implementation Guide establishes minimum setbacks for SEA Protected Trees, known as a TPZ. Since tree roots extend well beyond the visible crown of the tree and can be greatly impacted by disturbances to the ground around them, the TPZ extends 5 feet out from the dripline of the Protected Tree or 15 feet from the trunk, whichever distance is greater.

5 Results

5.1 Tree Inventory Summary

A total of 1,~~134~~191 trees were documented within the ~~Santa Clara River SEA, and~~ Survey Area, 1,~~021~~078 of ~~those~~which are classified as ~~either protected or~~ Protected. The Protected Trees include 1,005 Protected non-heritage ~~California Junipers. The protected~~ trees ~~include 953 protected trees and 68~~and 73 heritage trees. The remaining 113 trees are ~~classified as~~ dead and as such are not considered ~~protected~~Protected. Table 1 summarizes all trees that were mapped and evaluated within the ~~SEA~~ Survey Area. Appendix A, Tree Location, provides detailed locations of all individual trees assessed for the proposed project.

Table 1. Summary of Trees at the Prairie Song Reliability Project

Scientific Name	Common Name	~~Total~~ Number of Protected Non-heritage Trees	Number of Protected Heritage Trees	Total Number of Non-protected~~Protected~~ Trees	Number of Non-Protected Trees	Total Number of Trees
Fraxinus velutina	velvet ash	1	0	1	0	1
Juglans californica	Southern California black walnut	2	0	2	0	2
Juniperus californica	California juniper	~~953~~ 996	~~68~~ 73	1,069	113	~~1,134~~ 1,182
Platanus racemosa	California sycamore	1	0	1	0	1
Populus fremontii	Fremont cottonwood	5	0	5	0	5
	Total	~~953~~ 1,005	~~68~~ 73	1,078	113	~~1,134~~ 1,191

Trees in the Survey Area vary in size and stature and exhibit conditions typical of their locations as native trees in a natural setting. As presented in Appendix ~~B, SEA Protected~~ C, Tree ~~List~~Information Matrix, of the ~~953 protected~~1,078 Protected Trees (Protected non-heritage trees~~:~~ and heritage trees):

- ~~110~~121 trees (11.~~54~~22%) are in good health
- ~~450~~517 trees (47.~~22~~96%) are in fair health
- ~~293~~332 trees (30.~~75~~80%) are in poor health
- ~~100~~108 trees (10.~~50~~02%) are in critical health

The remaining 113 trees located in the SEA are classified as dead and are therefore not ~~protected~~Protected.

Trees in good condition exhibit acceptable vigor, healthy foliage, adequate structure, and lack major defects. Trees in fair condition show multiple defects and/or potentially declining vigor. Poor condition trees exhibit declining vigor, unhealthy foliage, poor structure, and multiple defects. Trees in critical condition exhibit a severe decline in vigor, major structural defects, or severe irreversible physiological deterioration.

Among the 953 protected trees1,078 Protected Trees surveyed, single and aggregate trunk diameters for the two largest stems range from 1 inchesinch to 27 inches. Tree heights vary from 2 feet1 foot for juvenile specimens to 2550 feet for mature trees.

BasedHeritage tree status is based on the SEA tree classifications (i.e., riparian, coniferous, upland hardwood) and minimum size requirementtrunk diameter for Heritage Tree classification, defined as having a crown canopy of 35 feet or moreprotected and heritage trees. Of the 1,078 Protected Trees within the Survey Area, a total of 68 Heritage Trees 73 heritage trees were identified on the project site. All, all of which are multi-trunk California- junipers.

The health of the 68 Heritage Trees 73 heritage trees ranges from good to critical. As detailed in Appendix B, SEA ProtectedC, Tree ListInformation Matrix:

- 7 trees (10.299.59%) are in good health
- 3237 trees (47.0650.68%) are in fair health
- 24 trees (35.2932.88%) are in poor health
- 5 trees (7.356.85%) are in critical health

Among the 953 protected73 heritage trees surveyed, single and aggregate trunk diameters for the two largest stems range from 2 inches to 2123 inches. Tree heights vary from 1 foot for juvenile specimens to 25 feet for mature trees.

5.2 MappingTree Impacts

The location of each tree identified on the project site is depicted in Appendix A, Tree Location.Impacts

5.3 Tree Removal/Encroachment

As previously stated, for the purposes of this arborist report, potential direct impacts are associated with tree removal or encroachment within the tree-protected protection zone (i.e., canopy5 feet beyond the dripline plus 5 feet or 15 feet from the trunk, whichever is greater). Specifically, tree impacts were determined using geographic information system technology, spatial locations of tree crowns, and a minimum distance of each tree relative to the potential project impact. A tree is considered removed if it more than 30% of its TPZ falls within the project's proposed limits of disturbance or if 30% or more of its TPZ is impacted. The TPZ is defined as 5 feet beyond the dripline or 15 feet from the trunk, whichever is greater.. A tree is considered encroached upon if less than0.01% to 30% of its TPZ is affected by proposed project activities, including soil or root disturbance and/or pruning, but the tree is not removed, and a. A tree is considered preserved it they are not removed and doif it does not experience any TPZ disturbance. Impact totals presented herein are based on proposed disturbance limits, fuel modification zones, and development plans as of the date of this report. The following tree impact findings are organized into two categories: non-Heritage Tree impacts and Heritage Tree impacts. Heritage tree status is based on the SEA tree classifications (i.e., riparian, coniferous, upland hardwood) and minimum trunk diameter for protected and Heritage Trees. This impact evaluation includes both gen-tie route options, although only one will ultimately be selected, and

assumed that the entirety of the 150' gen-tie right of way and pull areas will be temporarily impacted. As a result, the total number of impacted trees is expected to be lower depending on the chosen route and actual construction and gen tie pulling impacts and final design.. Additionally, field adjustments are likely to further minimize impacts to protected treesProtected Trees. The impact figures presented in this report represent a maximum potential impact, and actual impacts are expected to be reduced.

5.3.1 Non-heritage The locations of the individual trees that would be subject to impacts by the proposed project are presented in Appendix D.

Of the 953 Protected Trees that occur within Of the 1,078 in the Survey Area (Protected non-inclusive of Heritage Trees), 47 protected non-Heritage- Treesheritage trees and heritage trees), 65 could be directly impacted by the proposed project. The 47 protected non-Heritage65 Protected Tree impacts consist of 38comprise 55 potential removals (trees are within the grading limits or grading activities affect more than 30% of a TPZ), 9and 10 potential encroachments (trees that are not removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds are anticipated. The nine potential encroachment trees, as presented in Appendix B, SEA Protected Tree List, have encroachments that range from 1% to 24%. The remaining 906 protected non-Heritage Trees . The remaining 1,013 Protected Trees would not be directly impacted by the project. Table 2 provides a summary of the proposed impacts to non-heritageall SEA Protected Trees within and adjacent to the projectSurvey Area.

Table 2. Summary of Potential Impacts to SEAAll Protected Trees (Tree Impacts (Heritage and Non--heritage)

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Fraxinus velutina	*velvet ash*	1	0	1
Juglans californica	*Southern California black walnut*	1	0	1
Juniperus californica	California juniper	3853	910	4763
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
	Total	3855	910	4765

Note: SEA = Significant Ecological Area.

Appendix D, Potential

5.2.1 Protected Non-heritage Tree Impacts, presents

Of the locations of the individual1,005 Protected non-heritage trees that would occur within the Survey Area, 57 could be subject to impacts directly impacted by the proposed project. The 57 Protected non-heritage tree impacts consist of 48 potential removals and 9 potential encroachments. The nine potential encroachment trees have encroachments that range from 0.92% to 30%. The remaining 948 Protected non-heritage trees would not be directly impacted by the project. Table 3 provides a summary of the overall health ratings for the proposed impactedimpacts to non-Heritageheritage SEA Protected Trees within the project siteSurvey Area.

Table 3. Summary of ~~Overall Health Ratings for Potentially Impacted SEA~~Impacts to Protected ~~Trees (~~Non-~~-~~heritage~~)~~ Trees

~~Scientific Name~~	~~Common Name~~	~~Overall Health Rating~~				
		~~Dead**~~	~~Critical~~	~~Poor~~	~~Fair~~	~~Good~~
~~*Juniperus californica*~~	~~California juniper~~	~~0~~	~~1~~	~~9~~	~~29~~	~~8~~
~~Totals~~	~~0~~	~~1~~	~~9~~	~~29~~	~~8~~	

~~Note:~~ ~~SEA = Significant Ecological Area.~~
~~** Dead trees are not protected by the County of Los Angeles and do not require mitigation.~~

~~5.3.2 Heritage Tree Impacts~~

~~A total of 68 Heritage Trees are found on site, of which eight could be directly impacted by the project. The eight Heritage Tree potential impacts comprise six potential removals and two potential encroachments. The remaining 60 Heritage Trees would not be directly impacted by the project. Table 4 provides a summary of the potential impacts to SEA protected Heritage Trees within and adjacent to the project.~~

~~Table 4. Summary of Potential Impacts to SEA Protected Heritage Trees~~

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Fraxinus velutina	*velvet ash*	1	0	1
Juglans californica	*Southern California black walnut*	1	0	1
Juniperus californica	California juniper	~~6~~46	~~2~~9	~~8~~55
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
	Total	~~6~~48	~~2~~9	~~8~~57

~~Note:~~ ~~SEA = Significant Ecological Area.~~

~~Appendix D, Potential Tree Impacts, presents the locations of the individual trees that could be subject to impacts by the proposed project.~~

Table ~~5~~4 provides a summary of the overall health ratings for the ~~six Heritage Trees that could be proposed~~ impacted ~~by the project.~~ Protected non-heritage trees within the Survey Area.

Table 54. Summary of Overall Health Ratings for ~~Potentially~~ Impacted ~~SEA Heritage~~Protected Non-heritage Trees

Scientific Name	Common Name	Overall, Health Rating (Number)				
		~~Critical~~Dead*	~~Poor~~Critical	~~Fair~~Poor	~~Good~~Fair	~~Total~~Good
Fraxinus velutina	velvet ash	0	0	1	0	1
Juglans californica	Southern California black walnut	0	0	1	0	1
Juniperus californica	California juniper	~~0~~3	~~0~~9	~~3~~35	~~5~~8	~~0~~55
~~Totals~~*Platanus racemosa*	California sycamore	0	0	~~3~~0	~~5~~0	0
Populus fremontii	Fremont cottonwood	0	0	0	0	0
Totals		3	9	37	8	57

Note: ~~SEA = Significant Ecological Area.~~
~~*~~ Dead trees are not protected by the County of Los Angeles and do not require mitigation.

5.~~3.3 Non-protected~~2.2 Heritage Tree Impacts

~~Of the 113 non-protected~~A total of 73 heritage trees ~~that occur within the Survey Area, five non-protected trees~~are found on site, of which eight could be directly impacted by the ~~proposed~~ project. The ~~five non-protected potential~~eight heritage tree impacts ~~consist of three~~comprise seven potential removals and ~~two~~one potential ~~encroachments~~encroachment. The remaining ~~108 non-protected~~65 heritage trees would not be directly impacted by the project. ~~All of the non-protected tree removals are dead trees.~~ Table ~~6~~5 provides a summary of the ~~potential~~proposed impacts to ~~non-protected~~SEA Protected heritage trees within ~~and adjacent to~~ the ~~project~~Survey Area.

Table 65. Summary of ~~Potential~~ Impacts ~~Non-protected~~to SEA Protected Heritage Trees

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Fraxinus velutina	velvet ash	0	0	0
Juglans californica	Southern California black walnut	0	0	0
Juniperus californica	California juniper	~~3~~7	~~2~~1	~~5~~8
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
Total		~~3~~7	~~2~~1	~~5~~8

~~Appendix D, Potential Tree Impacts, presents the locations of the individual trees that could be subject to impacts by the proposed project.~~

Table ~~7~~6 provides a summary of overall health ratings for the ~~six non-protected~~eight heritage trees that could be impacted by the project.

Table ~~76~~. Summary of Overall Health Ratings for ~~Potentially~~ Impacted ~~Non-protected~~SEA Heritage Trees

Scientific Name	Common Name	Overall Health Rating (Number)				
		Critical ~~Dead~~	Poor~~Critical~~	Fair ~~Poor~~	~~Fair~~Good	~~Good~~Total
Fraxinus velutina	velvet ash	0	0	0	0	0
Juglans californica	Southern California black walnut	0	0	0	0	0
Juniperus californica	California juniper	~~5~~0	~~0~~3	~~0~~5	0	~~0~~8
~~Totals~~*Platanus racemosa*	~~5~~California sycamore	0	0	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0	0	0
	Totals	0	3	5	0	8

Note: Dead trees are not protected by the County of Los Angeles and do not require mitigation.

5.2.3 Dead Tree Analysis

A total of 113 trees in the Survey Area are dead and as such are not considered Protected. Four non-Protected Trees could be directly impacted by the proposed project. The four non-Protected Tree impacts consist of three potential removals and one potential encroachment. The remaining 109 non-Protected trees would not be directly impacted by the project. All of the non-Protected Tree removals are dead California juniper trees. Table 7 provides a summary of the proposed impacts to non-Protected Trees within the Survey Area.

Table 7. Summary of Dead Trees

Scientific Name	Common Name	Removals	Encroachments	Total Impacts
Fraxinus velutina	*velvet ash*	0	0	0
Juglans californica	*Southern California black walnut*	0	0	0
Juniperus californica	California juniper	3	1	4
Platanus racemosa	California sycamore	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
Total		3	1	4

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6 Mitigation

The proposed project's mitigation effort would include tree planting mitigation for incurred tree impacts, which would be consistent with the goals and intent of the County.

6.1 Mitigation Requirements

Per the County SEA Ordinance, any development that would remove a ~~Heritage Tree~~heritage tree or would remove more than two non-heritage-size SEA Protected Trees requires a CUP. Mitigation and monitoring for such removals are determined as part of the discretionary SEA CUP review and included as conditions of approval in the CUP. Mitigation and monitoring requirements for SEA CUPs must meet or exceed the mitigation and monitoring requirements of a Protected Tree permit.

~~Furthermore, at a minimum and per~~Per the County requirements, the removal of any SEA Protected Tree requires mitigation in the form of 2 replacement plantings, and the removal of a heritage tree requires mitigation in the form of 10 replacement plantings. Replacement trees should be seedlings of the same species as those being removed ~~and should be,~~ planted in an area of the project site where there is suitable habitat, and where the trees would be able to remain in perpetuity. As such, based on the ~~August~~December 2025 impact analysis that identified ~~44 potential~~up to 55 direct ~~tree~~Protected Tree removals (~~6 Heritage Trees~~7 heritage trees and ~~38~~48 Protected non-heritage ~~protected Trees), but for the CEC's Opt-In Application for Certification process,~~trees), the County would require up to ~~136~~166 mitigation trees ~~(depending on actual project impacts of the selected gen-tie route and final design)~~ to be planted in an area of the project site where there is suitable habitat and where the trees would be able to remain in perpetuity. Per the County requirements, Table 8, Summary of Individual Species Replacement Quantities, details the quantity of each species required for planting.

Table 8. Summary of Individual Species Estimated Replacement Quantities

Scientific Name	Common Name	Total ~~Impacted~~ Protected Removals	Replacement Ratio	Total Replacement Required
Fraxinus velutina	velvet ash	1	2:1	2
Juglans californica	Southern California black walnut	1	2:1	2
Juniperus californica	California juniper	~~38~~46	2:1	~~76~~92
Juniperus californica (~~Heritage Tree~~heritage tree)	California juniper	~~6~~7	10:1	~~60~~70
Platanus racemosa	California sycamore	0	2:1	0
Populus fremontii	Fremont cottonwood	0	2:1	0
	Totals	~~44~~55	N/A	~~136~~166

It should be noted that mitigation can include the protection of undersized, naturally sprouted trees of the same species growing on site. In addition, per the County Code, the County may require additional mitigation and monitoring requirements following review of the SEA CUPs. At a minimum, the County requires that the replacement

trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the applicant would be responsible for replanting and nurturing those new trees.

The final number of impacts and subsequent mitigation will be based upon final project design. As a result, the total number of impacted trees is expected to be lower depending on the selected gen-tie route. The impact figures presented in this report represent a maximum potential impact, and actual impacts are expected to be reduced.

7 Tree Protection

~~As currently designed, of~~Of the 1,~~021 protected trees~~ 078 Protected Trees within the Survey Area~~, 44~~ (Protected non-heritage trees and heritage trees), up to 55 would require removal to accommodate the proposed project. As such, it is recommended that the remaining ~~966 preserved trees and 11 encroached-upon trees be protected in place. Furthermore, it is recommended that the 11 encroached-upon protected trees located immediately adjacent to the project site be protected~~1,013 Protected Trees, along with up to 10 Protected Trees subject to encroachment, ~~be protected in places~~safeguarded from damage during construction in accordance with the tree protection standards found in Appendix E, Tree Protection Measures.

An additional 113 trees found within the Survey Area have been identified as dead; these are not considered Protected and therefore do not require tree protection measures.

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8 Conclusion

A total of 1,191 trees were found within the Survey Area, 1,078 of which are classified as Protected. The ~~project~~ Protected Trees include 1,005 Protected non-heritage trees and 73 heritage trees. The remaining 113 trees are dead and are not considered Protected or require mitigation for removal.

Up to 69 trees could be directly ~~impact 60 trees~~impacted, with ~~47 direct~~up to 11 encroachments (1 heritage tree, 9 Protected non-heritage trees, and 1 non-Protected Tree) and 58 removals (~~6 Heritage Trees, 38~~7 heritage trees, 48 Protected ~~Trees~~non-heritage trees, and 3 non-~~protected trees), and 13 encroachments (2 Heritage Trees, 9 Protected Trees, and 2 non-protected trees), of which 44 require mitigation (38 protected tree removal and 6 heritage tree removals).~~Protected Trees). Mitigation ~~for the 44 impacted trees requires~~will be necessary for the removal of up to 55 Protected Trees (7 heritage and 48 Protected non-heritage) and will require replacement using seedlings of the same species, at a ratio of 2:1 for Protected ~~Trees~~non-heritage trees and 10:1 for ~~Heritage Trees.~~heritage trees. Based on these requirements, up to ~~136~~166 mitigation trees may be needed to satisfy County standards. ~~However, as~~

Of the remaining 1,023 Protected Trees, 1,013 preserved trees and up to 10 encroached-upon trees located throughout the Survey Area will be safeguarded from damage during construction in accordance with the tree protection standards found in Appendix E Tree Protection Measures.

As previously noted, this impact evaluation includes both gen-tie route options, although only one will ultimately be selected. Consequently, the total number of impacted trees is expected to be lower depending on the chosen gen-tie route. In addition, field adjustments during implementation are likely to further reduce impacts to ~~protected trees.~~Protected Trees. The impact figures presented in this report represent a maximum potential impact, and actual impacts are expected to be lower.

~~The remaining 964 preserved trees and 13 encroached-upon trees located throughout the proposed project site are recommended to be preserved in place. It is recommended that the 13 encroached-upon protected trees located immediately adjacent to the project site be protected in accordance with the tree protection standards found in Appendix E Tree Protection Measures, Actual tree impact or encroachment numbers may be lower than anticipated, as presented in this report, once grading plans are staked in the field and are being implemented.~~

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9 Arborist's Disclosure

This report provides conclusions and recommendations based only on a visual examination of the trees and surrounding site by an International Society of Arboriculture Certified Arborist and reasonable reliance upon the completeness and accuracy of the information provided to the arborist. The examination did not include subterranean or internal examination of the trees.

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near them. Although trees provide many benefits to those who live near them, they also include inherent risks from breakage or failure that can be minimized but not eliminated.

Arborists cannot detect every condition that could possibly lead to the failure of a tree. Trees are living organisms subject to attack by disease, insects, fungi, weather, and other forces of nature, and conditions that lead to failure are often hidden within trees and below ground. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Arborists cannot predict acts of nature that can cause even an apparently healthy tree to fail, including storms of sufficient strength. Additionally, arborists cannot guarantee that a tree will be healthy or safe under all circumstances or for any specific period of time. A tree's condition could change over a short or long period of time due to climatic, cultural, or environmental conditions. Further, there is no guarantee or certainty that recommendations or efforts to correct unsafe conditions will prevent future breakage or failure of a tree.

To live or work near trees is to accept some degree of risk. Neither the author of this report nor Dudek have assumed any responsibility for, nor will either of them be liable for, any claims, losses, or damages for damage to any tree, death or injury to any person, or any loss of or damage to any personal or real property.

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10 References Cited

CTLA (Council of Tree and Landscape Appraisers). 2020. Guide for Plant Appraisal. 10th Edition, Revised (digital edition). Council of Tree and Landscape Appraisers.

Los Angeles County Regional Planning. 2020. *Significant Ecological Areas (SEA) Ordinance Implementation Guide*. January 16, 2020. LA County SEA Program. Accessed November 9, 2023. https://planning.lacounty.gov/wp-content/uploads/2022/11/SEA-IG-6-30-20_Full.pdf.

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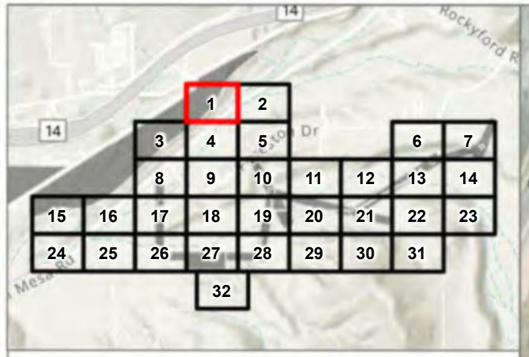
Appendix A
Tree Locations



Tree Species

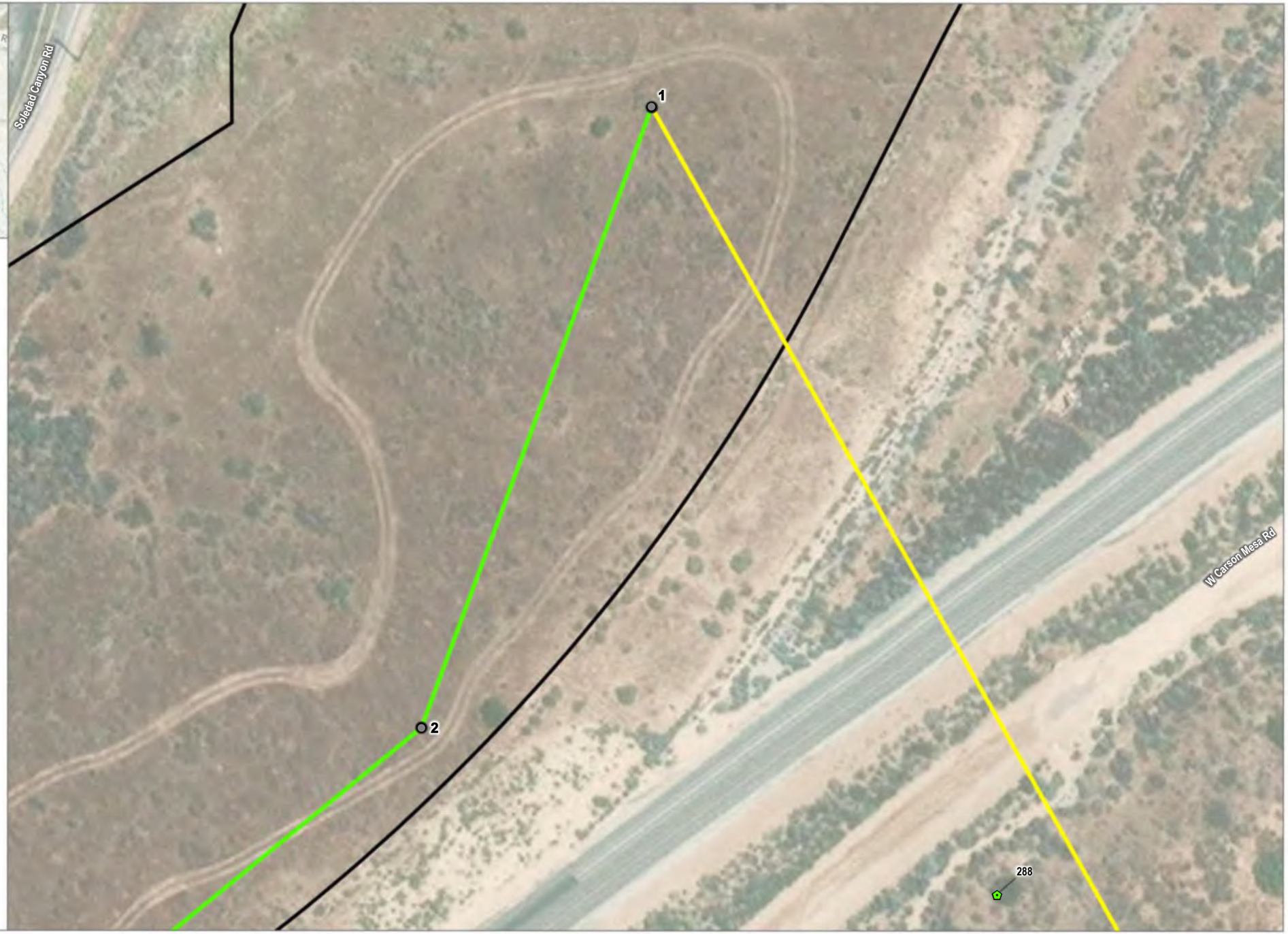
- California Juniper

Project Components

- Proposed BESS Facility Site
- Transmission Pole

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option
- Overhead Northern Gen-Tie Route Option



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX A1

Tree Location

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

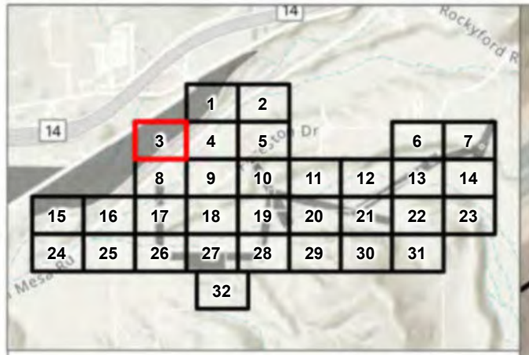
DUDEK

0 30 60 Feet

APPENDIX A2

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

Project Components

- Proposed BESS Facility Site
- Transmission Pole

Fiber Optic Routes

- Underground Fiber Optic Route

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX A3

Tree Location

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX A4

Tree Location

Prairie Song Reliability Project

Tree Species

- California Juniper

Project Components

- Gen-Tie Work Area
- Pole Pad and Access Roads Area

Gen-Tie Route Options

- Overhead Northern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

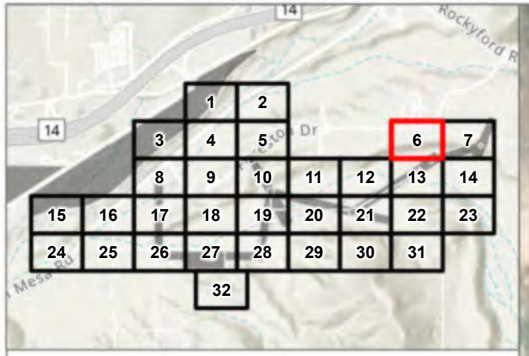
DUDEK

0 30 60 Feet

APPENDIX A5

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

Project Components

- Gen-Tie Work Area
- Pole Pad and Access Roads Area

Gen-Tie Routes

- Overhead Gen-Tie Route (SCE)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX A6

Tree Location

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

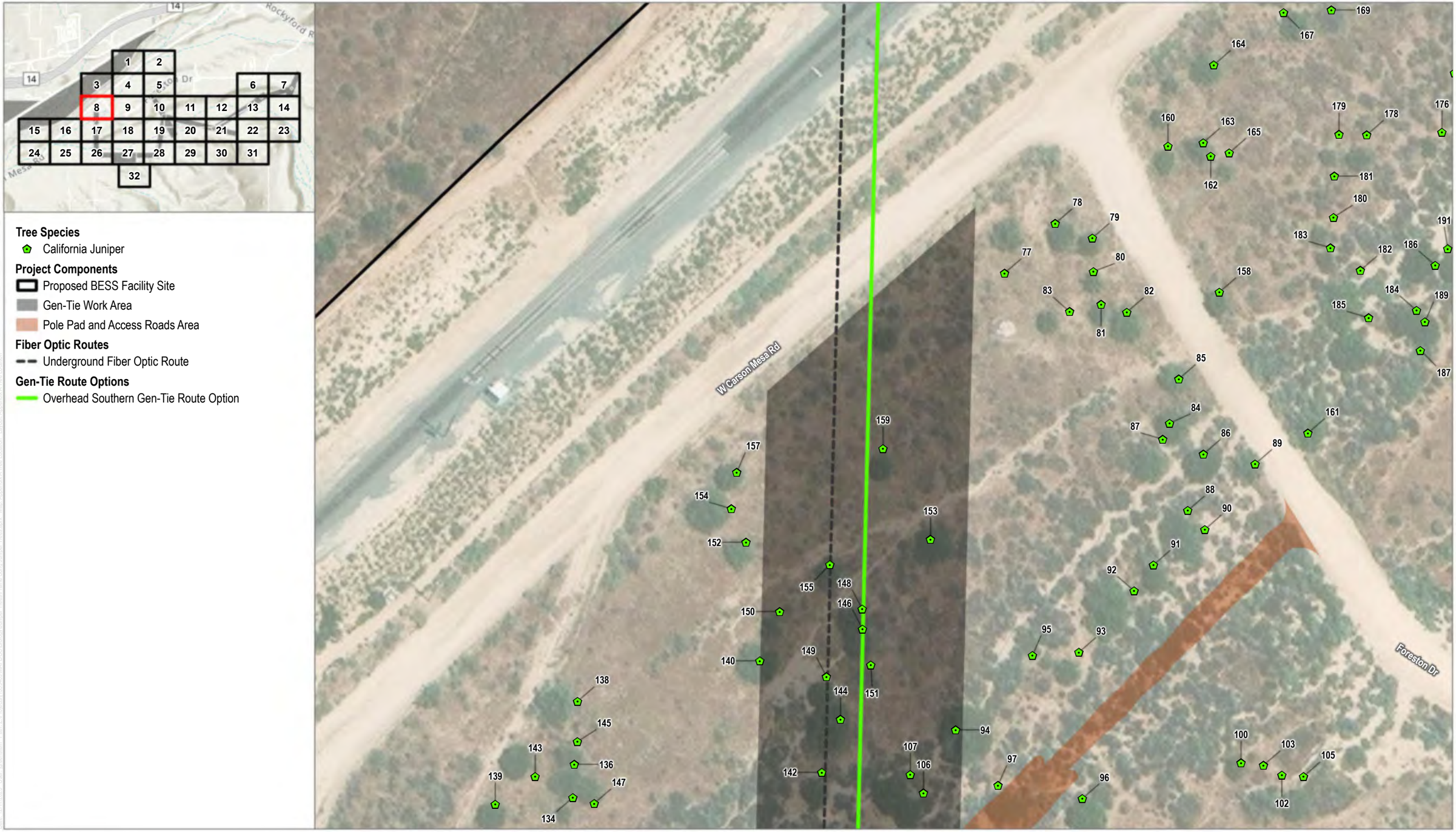
DUDEK

0 30 60 Feet

APPENDIX A7

Tree Location

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

APPENDIX A8

Tree Location

Prairie Song Reliability Project

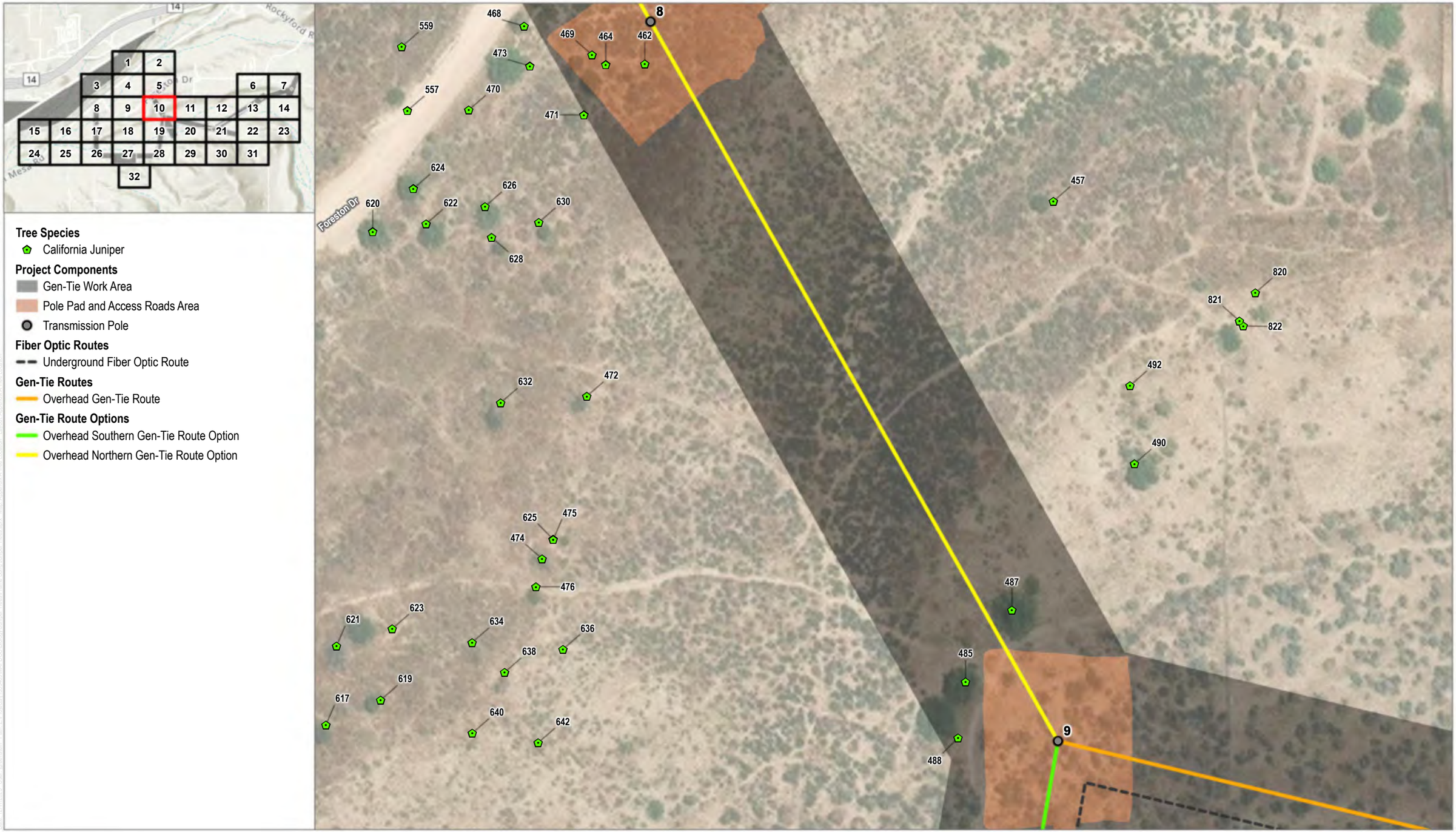
SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

APPENDIX A9

Tree Location

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

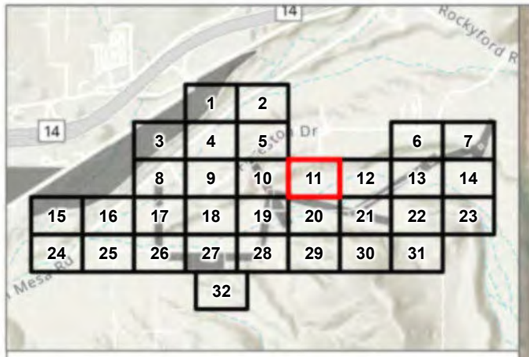
DUDEK

0 30 60 Feet

APPENDIX A10

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

Project Components

- Gen-Tie Work Area

817
816
815
814
813
827
828
812
826
825
833
811
824
823
831
832

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

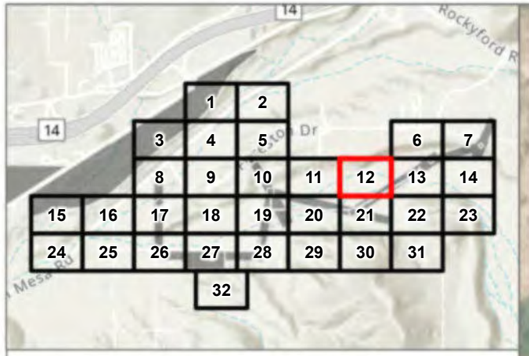
DUDEK

0 30 60 Feet

APPENDIX A11

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

Project Components

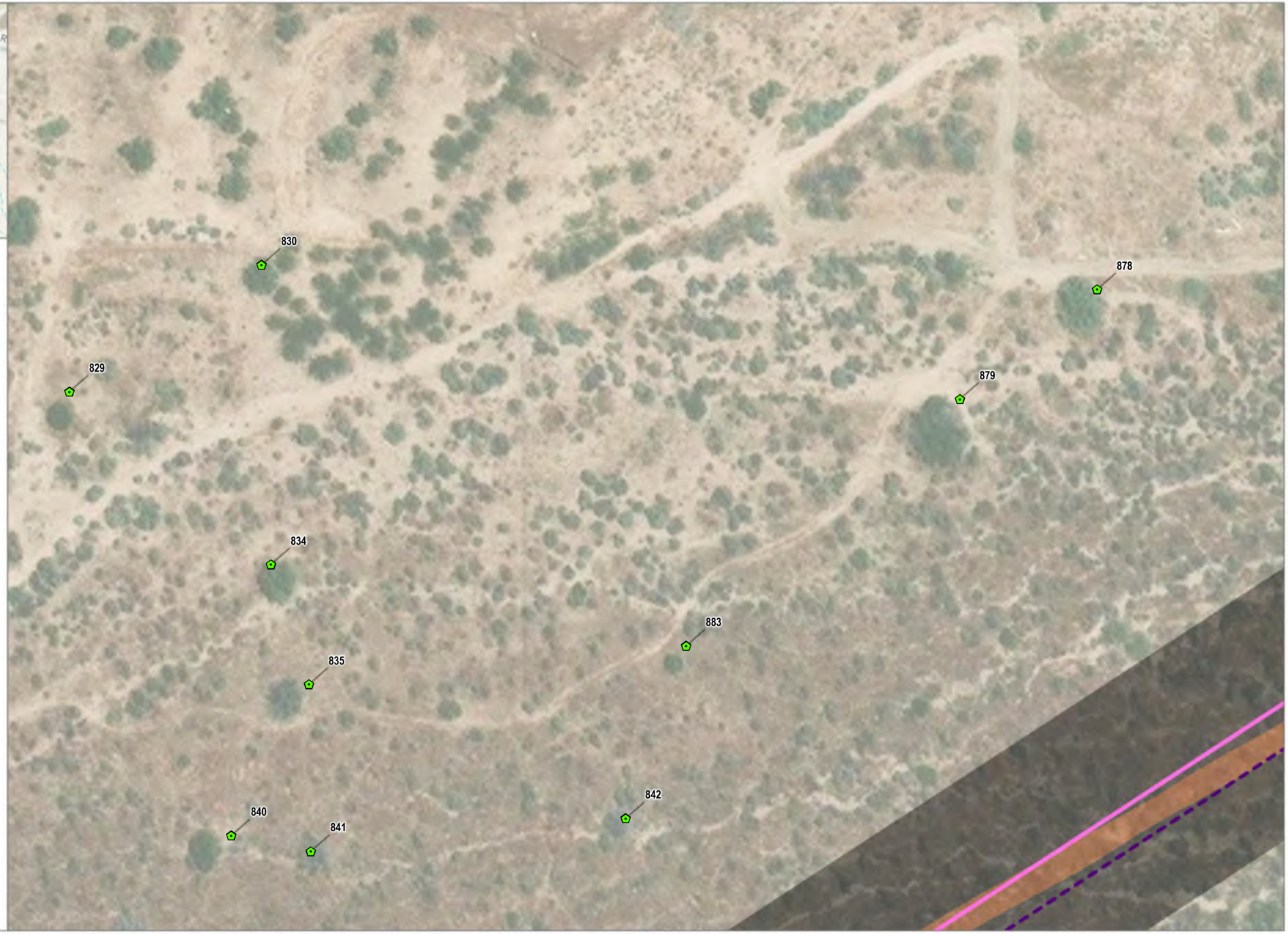
- Gen-Tie Work Area
- Pole Pad and Access Roads Area

Fiber Optic Routes

- Underground Fiber Optic Route (SCE)

Gen-Tie Routes

- Overhead Gen-Tie Route (SCE)



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

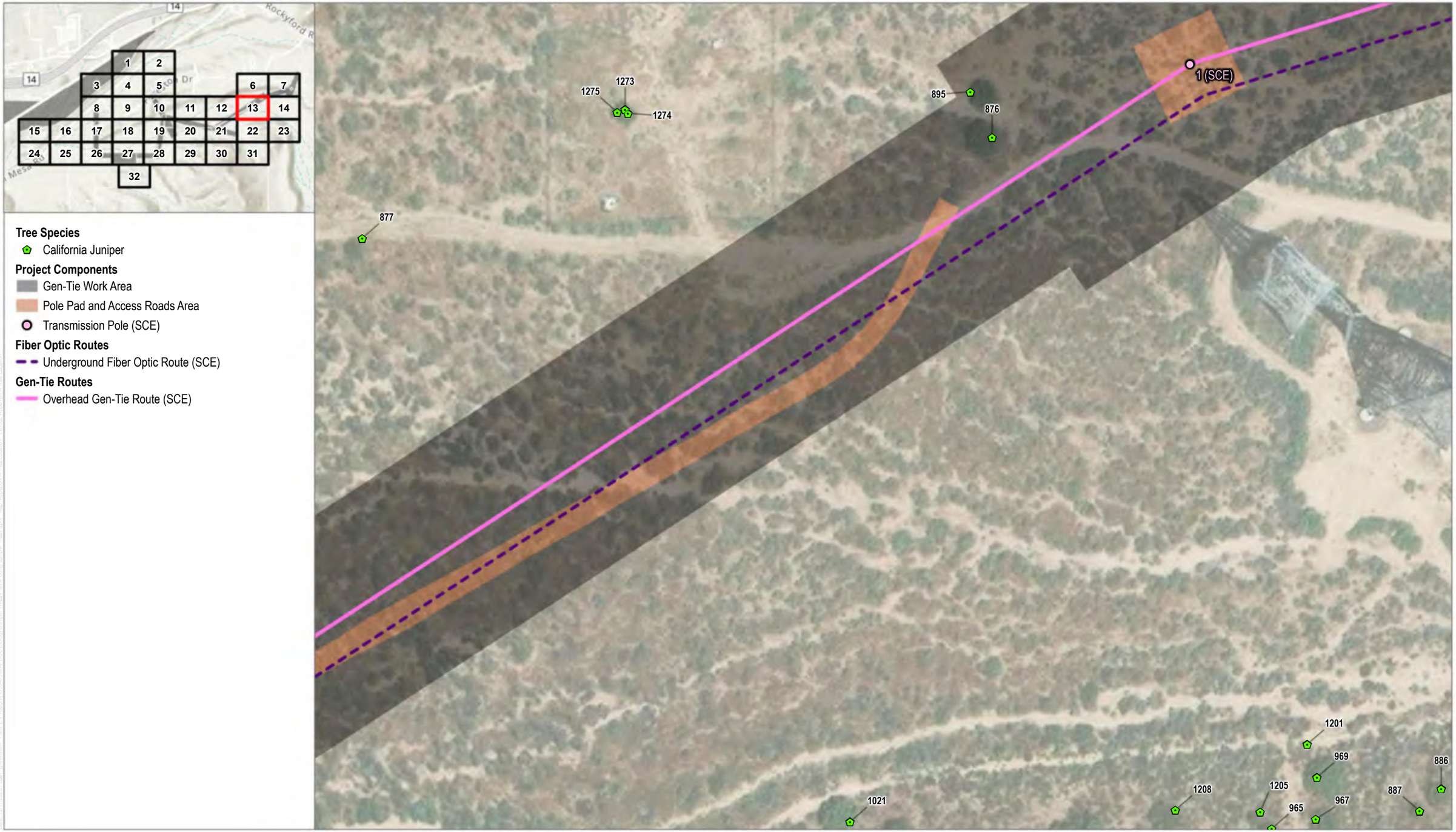
N

0 30 60 Feet

APPENDIX A12

Tree Location

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

APPENDIX A13

Tree Location

Prairie Song Reliability Project

Tree Species

California Juniper

Project Components

Gen-Tie Work Area

Fiber Optic Routes

Underground Fiber Optic Route (SCE)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

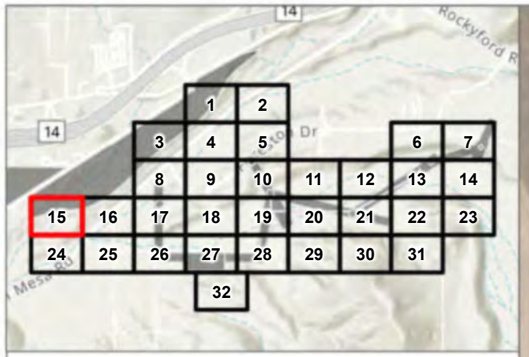
DUDEK

0 30 60 Feet

APPENDIX A14

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

Project Components

- Proposed BESS Facility Site

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX A15

Tree Location

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

APPENDIX A16

Tree Location

Prairie Song Reliability Project

Tree Species

- California Juniper

Project Components

- Gen-Tie Work Area
- Pole Pad and Access Roads Area
- Transmission Pole

Fiber Optic Routes

- Underground Fiber Optic Route

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

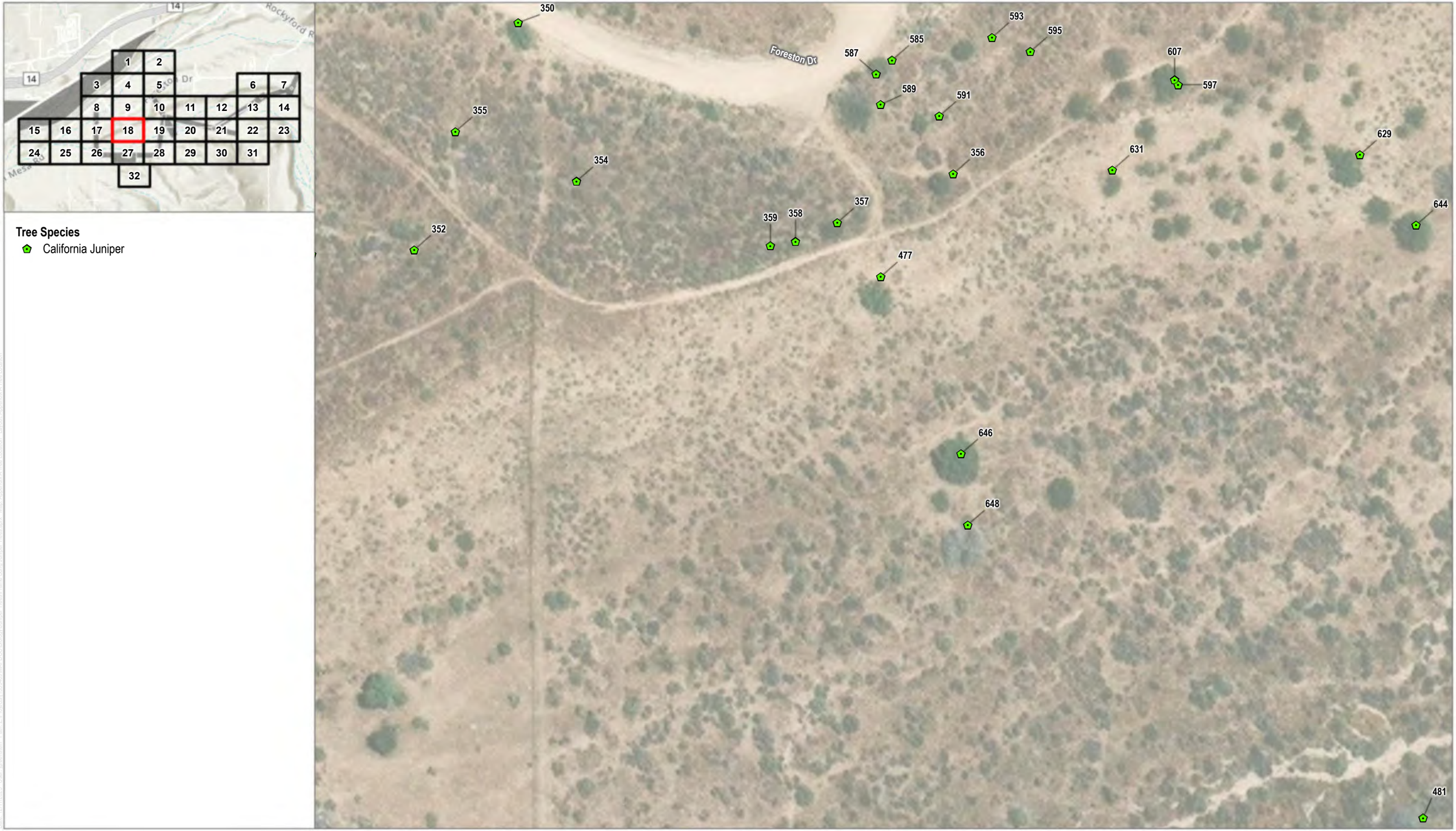
DUDEK

0 30 60 Feet

APPENDIX A17

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

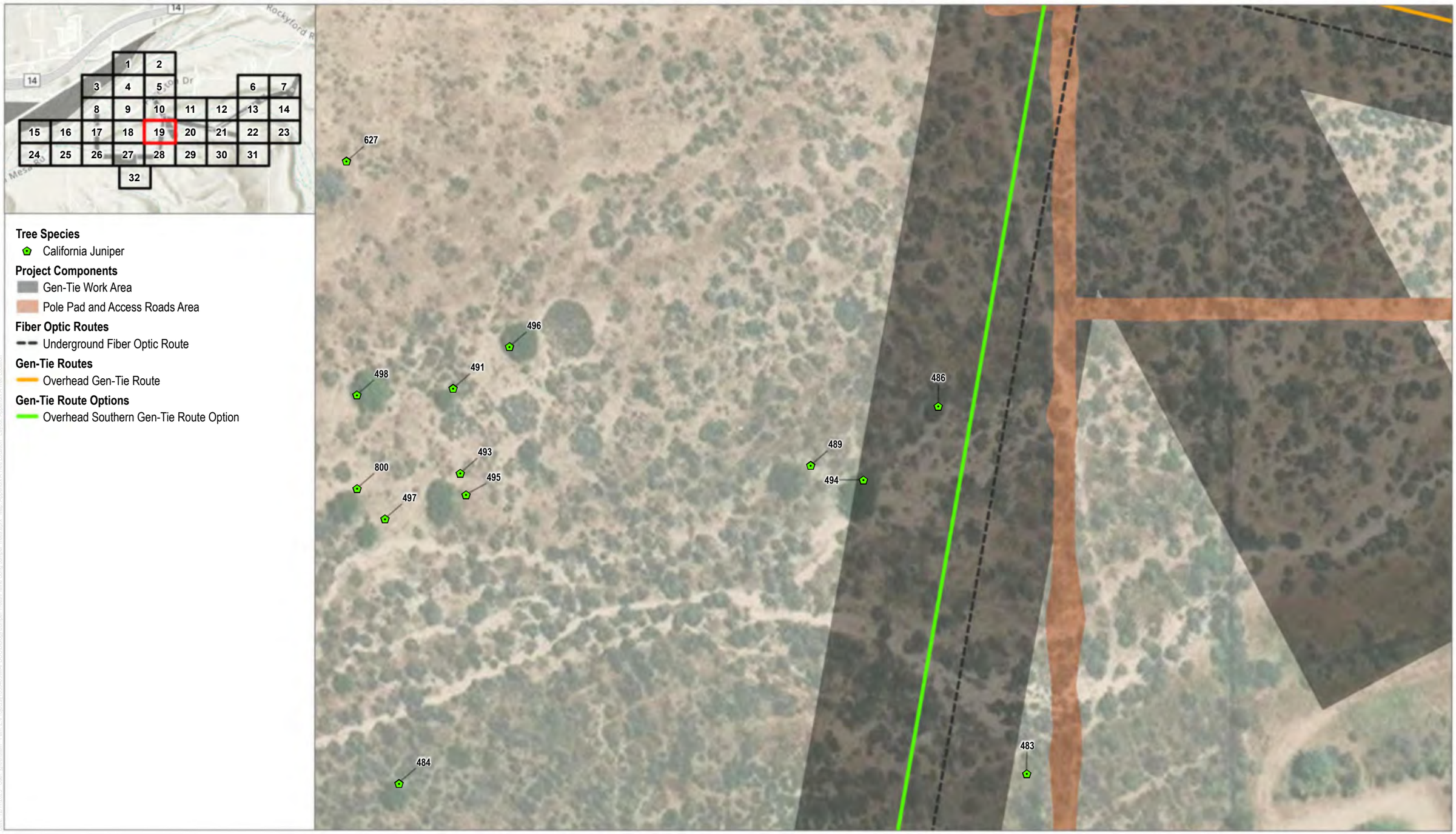
DUDEK

0 30 60 Feet

APPENDIX A18

Tree Location

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

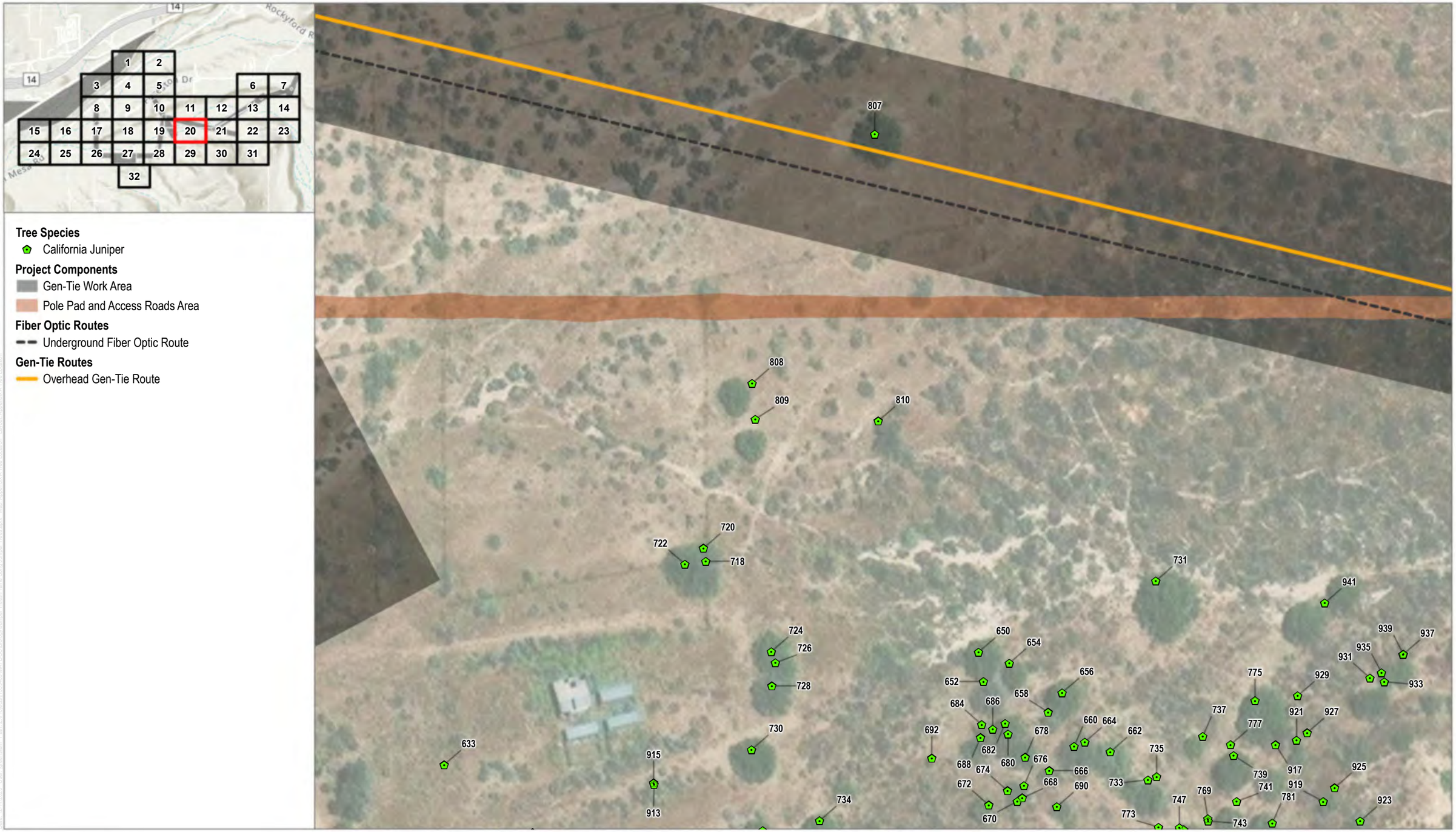
DUDEK

0 30 60 Feet

APPENDIX A19

Tree Location

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX A20

Tree Location

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

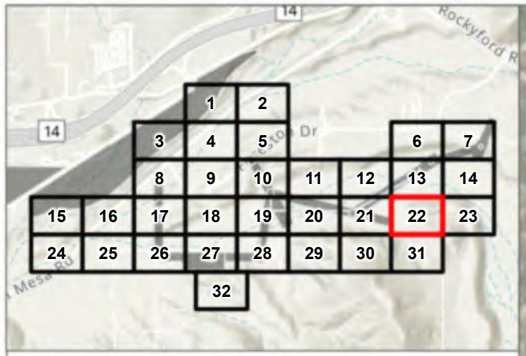
DUDEK

0 30 60 Feet

APPENDIX A21

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

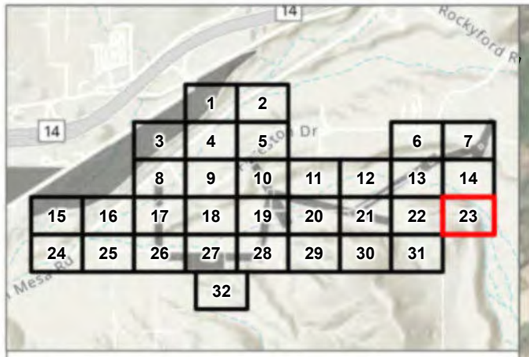
DUDEK

0 30 60 Feet

APPENDIX A22

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

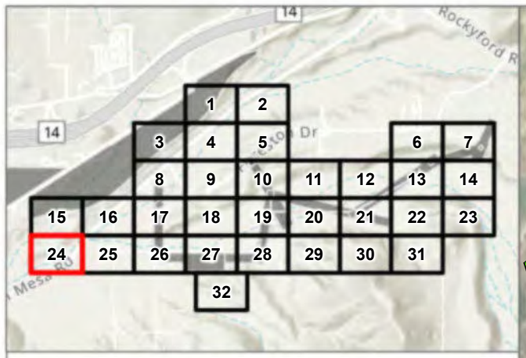
N

0 30 60 Feet

APPENDIX A23

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

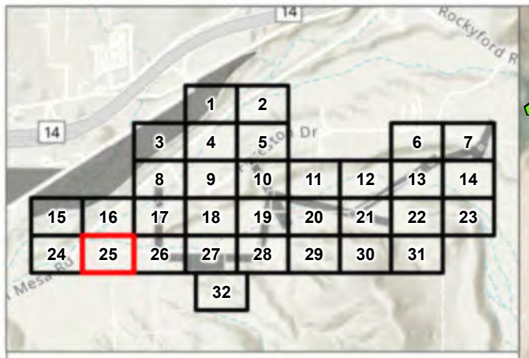
N

0 30 60 Feet

APPENDIX A24

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX A25

Tree Location

Prairie Song Reliability Project

Tree Species

- California Juniper
- California Sycamore
- Fremont Cottonwood
- Southern California Black Walnut
- Velvet Ash

Project Components

- Construction Laydown Area
- Gen-Tie Work Area
- Pole Pad and Access Roads Area
- Transmission Pole

Fiber Optic Routes

- Underground Fiber Optic Route

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

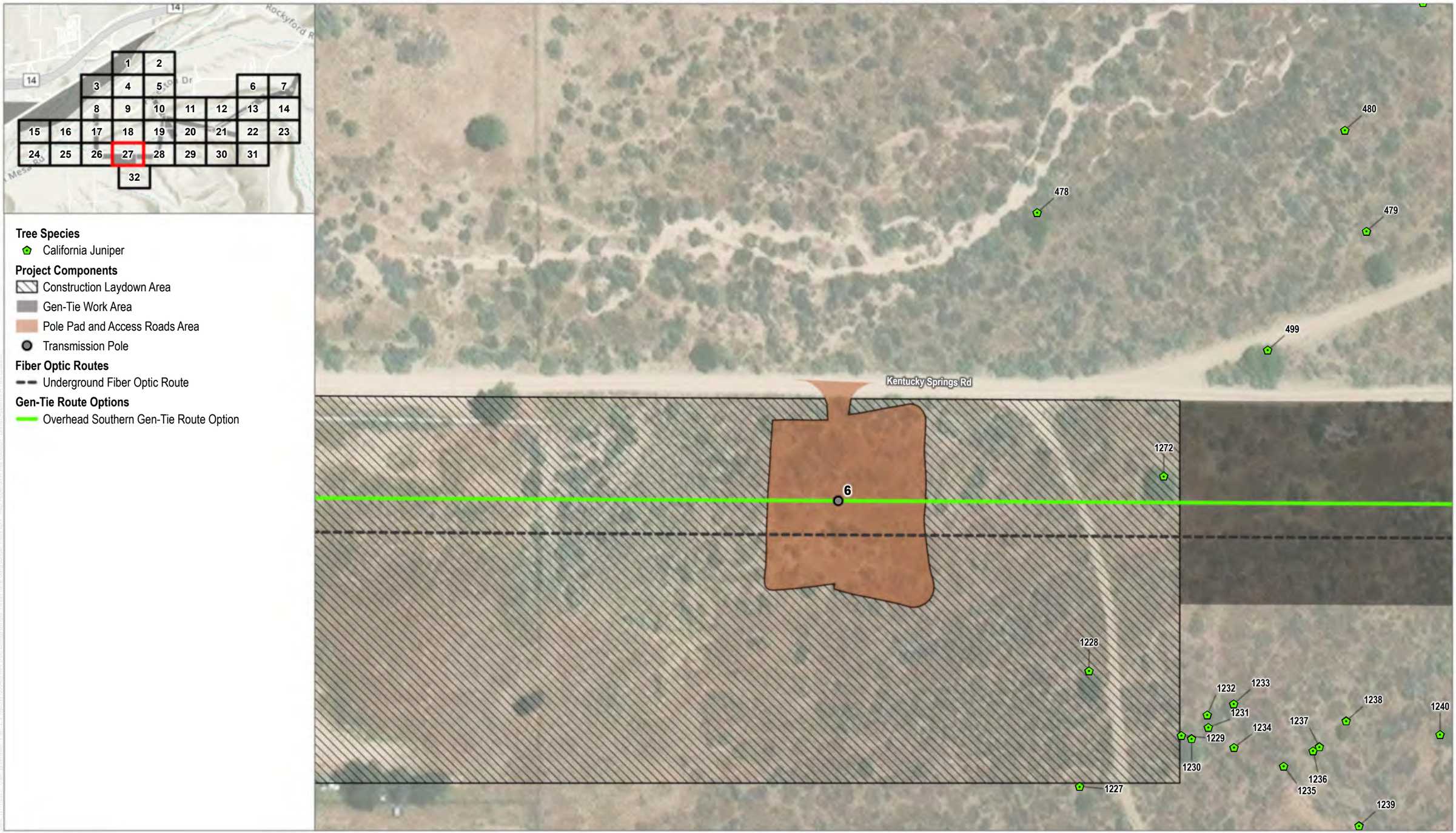
DUDEK

0 30 60 Feet

APPENDIX A26

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

Project Components

- Construction Laydown Area
- Gen-Tie Work Area
- Pole Pad and Access Roads Area
- Transmission Pole

Fiber Optic Routes

- Underground Fiber Optic Route

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

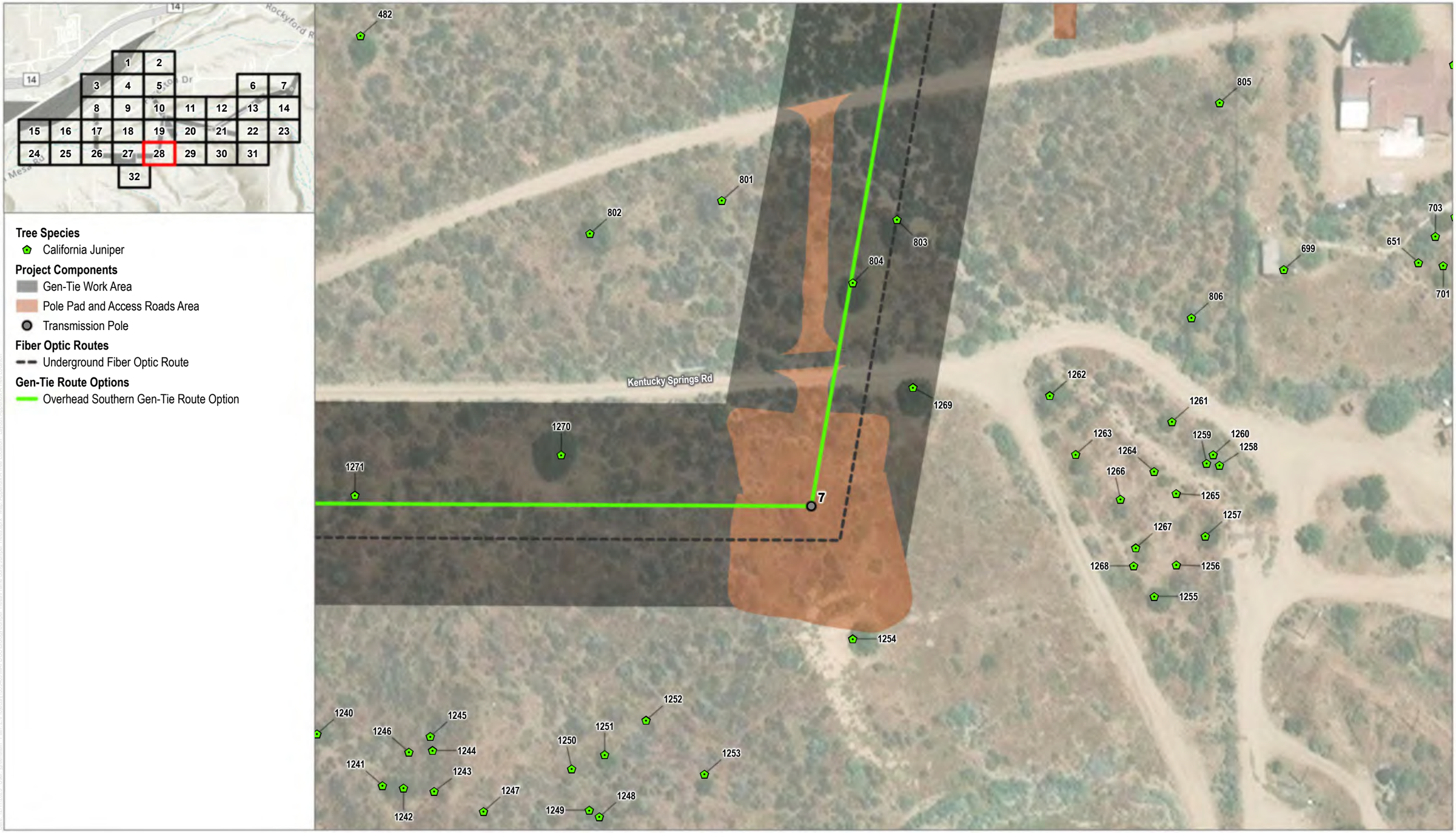
DUDEK

0 30 60 Feet

APPENDIX A27

Tree Location

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

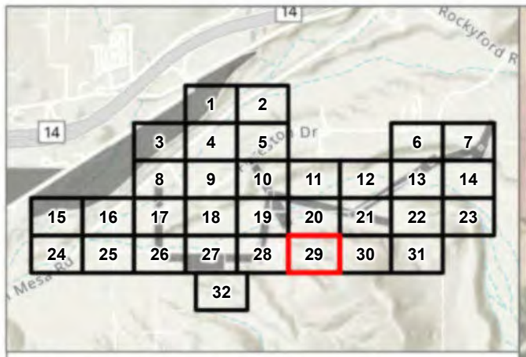
DUDEK

0 30 60 Feet

APPENDIX A28

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX A29

Tree Location

Prairie Song Reliability Project

Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

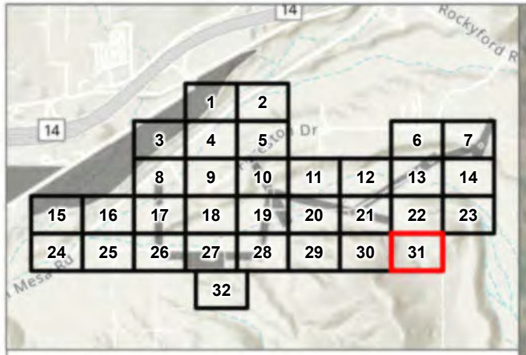
N

0 30 60 Feet

APPENDIX A30

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

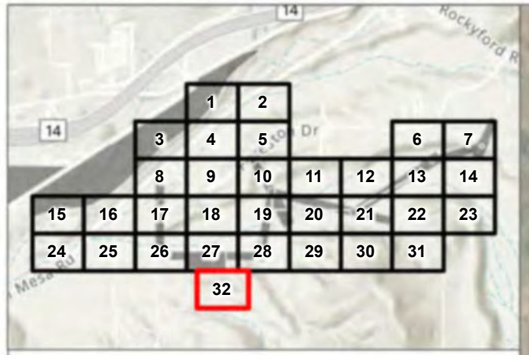
DUDEK

0 30 60 Feet

APPENDIX A31

Tree Location

Prairie Song Reliability Project



Tree Species

- California Juniper

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX A32

Tree Location

Prairie Song Reliability Project

Appendix B

SEA Protected Tree List

APPENDIX A: SEA PROTECTED TREE LIST

** indicates species is listed as a rare plant by California Native Plant Society*

ALTADENA FOOTHILLS & ARROYOS SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Abies concolor	white fir	5”	7”	30”	47”
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Aesculus californica	California buckeye	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arbutus menziesii	Pacific madrone	6”	8”	36”	56”
Arctostaphylos glandulosa (all subspecies)	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Calocedrus decurrens	incense cedar	5”	7”	30”	47”
Ceanothus spinosus	greenbark ceanothus	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Malosma laurina	laurel sumac	6”	8”	36”	56”
Pinus coulteri	Coulter pine	5”	7”	30”	47”
Pinus jeffreyi	Jeffrey pine	5”	7”	30”	47”
Pinus lambertiana	sugar pine	5”	7”	30”	47”
Pinus ponderosa	ponderosa pine	5”	7”	30”	47”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus durata var. *gabrielensis**	San Gabriel Mtns. leather oak	3”	4”	18”	28”
*Quercus engelmannii**	Engelmann oak	3”	4”	18”	28”
Quercus wislizeni	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiandra	yellow willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

ANTELOPE VALLEY SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Abies concolor	white fir	5”	7”	30”	47”
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Adenostoma sparsifolium	red shank	6”	8”	36”	56”
Aesculus californica	California buckeye	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arctostaphylos glandulosa (all subspecies)	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Calocedrus decurrens	incense cedar	5”	7”	30”	47”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Cercocarpus ledifolius	curl leaf/desert mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Juniperus californica	Califonia juniper	All specimens	NA	35’ canopy spread	NA
Juniperus grandis	Sierra juniper	5”	7”	30”	47”
Juniperus osteosperma	Utah juniper	5”	7”	30”	47”
Malosma laurina	laurel sumac	6”	8”	36”	56”
Pinus coulteri	Coulter pine	5”	7”	30”	47”
Pinus flexilis	limber pine	5”	7”	30”	47”
Pinus jeffreyi	Jeffrey pine	5”	7”	30”	47”
Pinus lambertiana	sugar pine	5”	7”	30”	47”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Pinus monophylla	pinyon pine	5”	7”	30”	47”
Pinus ponderosa	ponderosa pine	5”	7”	30”	47”
Pinus sabiniana	foothill pine	5”	7”	30”	47”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prosopis glandulosa	honey mesquite	6”	8”	36”	56”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus cornelius-mulleri	Muller’s oak	6”	8”	36”	56”
Quercus john-tuckeri	Tucker oak	6”	8”	36”	56”
Quercus kelloggii	California black oak	6”	8”	36”	56”
Quercus palmeri	Palmer’s oak	6”	8”	36”	56”
Quercus wislizeni var. *frutescens*	interior live oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiandra	yellow willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”
Yucca brevifolia	Joshua tree	All specimens	NA	20’ tall	NA

CRUZAN MESA VERNAL POOLS SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Arctostaphylos glandulosa (all subspecies)	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Juniperus californica	Califonia juniper	All specimens	NA	35’ canopy spread	NA
Malosma laurina	laurel sumac	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus john-tuckeri	Tucker oak	6”	8”	36”	56”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”

EAST SAN GABRIEL VALLEY SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Ceanothus spinosus	greenbark ceanothus	6”	8”	36”	56”
Ceanothus crassifolius	hoaryleaf ceanothus	6”	8”	36”	56”
Ceanothus megacarpus	big-pod ceanothus	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Malosma laurina	laurel sumac	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus durata var. *gabrielensis**	San Gabriel Mtns. leather oak	3”	4”	18”	28”
*Quercus engelmannii**	Engelmann oak	3”	4”	18”	28”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiandra	yellow willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

HARBOR LAKE REGIONAL PARK SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

JOSHUA TREE WOODLANDS SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Aesculus californica	California buckeye	6”	8”	36”	56”
Cercocarpus ledifolius	curl-leaf mountain-mahogany	6”	8”	36”	56”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
*Hesperocyparis nevadensis**	Piute cypress	3”	4”	18”	28”
Juniperus californica	Califonia juniper	All specimens	NA	35’ canopy spread	NA
Pinus sabiniana	foothill pine	5”	7”	30”	47”
Prosopis glandulosa	honey mesquite	6”	8”	36”	56”
Yucca brevifolia	Joshua tree	All specimens	NA	20’ tall	NA

PALOS VERDE PENINSULA AND COASTLINE SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Malosma laurina	laurel sumac	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Prunus ilicifolia ssp. *lyonii*	Catalina Island cherry	3”	4”	18”	28”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

PUENTE HILLS SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Aesculus californica	California buckeye	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Ceanothus megacarpus	big-pod ceanothus	6”	8”	36”	56”
Ceanothus spinosus	greenbark ceanothus	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Malosma laurina	laurel sumac	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
*Quercus engelmannii**	Engelmann oak	3”	4”	18”	28”
Quercus lobata	Valley oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

Rio Hondo College and Wildlife Sanctuary SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Malosma laurina	laurel sumac	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”

San Andreas SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Abies concolor	white fir	5”	7”	30”	47”
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Aesculus californica	California buckeye	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Calocedrus decurrens	incense cedar	5”	7”	30”	47”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Cercocarpus ledifolius	curl leaf/desert mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
*Hesperocyparis nevadensis**	Piute cypress	3”	4”	18”	28”
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Juniperus californica	Califonia juniper	All specimens	NA	35’ canopy spread	NA
Malosma laurina	laurel sumac	6”	8”	36”	56”
Pinus coulteri	Coulter pine	5”	7”	30”	47”
Pinus jeffreyi	Jeffrey pine	5”	7”	30”	47”
Pinus lambertiana	sugar pine	5”	7”	30”	47”
Pinus monophylla	pinyon pine	5”	7”	30”	47”
Pinus ponderosa	ponderosa pine	5”	7”	30”	47”
Pinus sabiniana	foothill pine	5”	7”	30”	47”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prosopis glandulosa	honey mesquite	6”	8”	36”	56”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus douglasii	blue oak	6”	8”	36”	56”
Quercus garryana	Oregon oak	6”	8”	36”	56”
Quercus john-tuckeri	Tucker oak	6”	8”	36”	56”
Quercus kelloggii	California black oak	6”	8”	36”	56”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiandra	yellow willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Umbellularia californica	California bay	6”	8”	36”	56”
Yucca brevifolia	Joshua tree	All specimens	NA	20’ tall	NA

San Dimas Canyon & San Antonio Wash SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Abies concolor	white fir	5”	7”	30”	47”
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Adenostoma sparsifolium	red shank	6”	8”	36”	56”
Aesculus californica	California buckeye	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Calocedrus decurrens	incense cedar	5”	7”	30”	47”
Ceanothus megacarpus	big-pod ceanothus	6”	8”	36”	56”
Ceanothus spinosus	greenbark ceanothus	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Cercocarpus ledifolius	curl leaf/desert mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	Toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Juniperus grandis	Sierra juniper	5”	7”	30”	47”
Malosma laurina	laurel sumac	6”	8”	36”	56”
Pinus coulteri	Coulter pine	5”	7”	30”	47”
Pinus jeffreyi	Jeffrey pine	5”	7”	30”	47”
Pinus lambertiana	sugar pine	5”	7”	30”	47”
Pinus ponderosa	ponderosa pine	5”	7”	30”	47”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus douglasii	blue oak	6”	8”	36”	56”
Quercus durata var. *gabrielensis**	San Gabriel Mtns. leather oak	3”	4”	18”	28”
*Quercus engelmannii**	Engelmann oak	3”	4”	18”	28”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiandra	yellow willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

SAN GABRIEL CANYON SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Abies concolor	white fir	5”	7”	30”	47”
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arbutus menziesii	Pacific madrone	6”	8”	36”	56”
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Calocedrus decurrens	incense cedar	5”	7”	30”	47”
Ceanothus megacarpus	big-pod ceanothus	6”	8”	36”	56”
Ceanothus spinosus	greenbark ceanothus	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	toyon	6”	8”	36”	56”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Juniperus californica	Califonia juniper	All specimens	NA	35’ canopy spread	NA
Malosma laurina	laurel sumac	6”	8”	36”	56”
Pinus coulteri	Coulter pine	5”	7”	30”	47”
Pinus jeffreyi	Jeffrey pine	5”	7”	30”	47”
Pinus lambertiana	sugar pine	5”	7”	30”	47”
Pinus ponderosa	ponderosa pine	5”	7”	30”	47”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus douglasii	blue oak	6”	8”	36”	56”
Quercus durata var. *gabrielensis**	San Gabriel Mtns. leather oak	3”	4”	18”	28”
*Quercus engelmannii**	Engelmann oak	3”	4”	18”	28”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

SANTA CLARA RIVER SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Adenostoma sparsifolium	red shank	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Calocedrus decurrens	incense cedar	5”	7”	30”	47”
Ceanothus spinosus	greenbark ceanothus	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Juniperus californica	Califonia juniper	All specimens	NA	35’ canopy spread	NA
Malosma laurina	laurel sumac	6”	8”	36”	56”
Pinus monophylla	pinyon pine	5”	7”	30”	47”
Pinus sabiniana	foothill pine	5”	7”	30”	47”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus cornelius-mulleri	desert scrub oak, Muller oak	6”	8”	36”	56”
Quercus douglasii	blue oak	6”	8”	36”	56”
Quercus garryana	Oregon oak	6”	8”	36”	56”
Quercus john-tuckeri	Tucker oak	6”	8”	36”	56”
Quercus kelloggii	California black oak	6”	8”	36”	56”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus palmeri	Palmer’s oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiandra	yellow willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

SANTA FELICIA SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Aesculus californica	California buckeye	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Cercocarpus ledifolius	curl leaf/desert mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Juniperus californica	Califonia juniper	All specimens	NA	35’ canopy spread	NA
Malosma laurina	laurel sumac	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus cornelius-mulleri	desert scrub oak, Muller oak	6”	8”	36”	56”
Quercus douglasii	blue oak	6”	8”	36”	56”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Quercus garryana	Oregon oak	6”	8”	36”	56”
Quercus john-tuckeri	Tucker oak	6”	8”	36”	56”
Quercus kelloggii	California black oak	6”	8”	36”	56”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus ×macdonaldii	MacDonald oak	6”	8”	36”	56”
Quercus palmeri	Palmer’s oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

SANTA SUSANA MOUNTAINS & SIMI HILLS SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Acer negundo	boxelder	6”	8”	36”	56”
Adenostoma sparsifolium	red shank	6”	8”	36”	56”
Alnus rhombifolia	white alder	3”	4”	18”	28”
Arctostaphylos glandulosa	Eastwood manzanita	6”	8”	36”	56”
Arctostaphylos glauca	big berry manzanita	6”	8”	36”	56”
Ceanothus megacarpus	bigpod ceanothus	6”	8”	36”	56”
Ceanothus spinosus	greenbark ceanothus	6”	8”	36”	56”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Fraxinus dipetala	California ash	3”	4”	18”	28”
Fraxinus velutina	velvet ash, Arizona ash	3”	4”	18”	28”
Heteromeles arbutifolia	toyon	6”	8”	36”	56”
*Juglans californica**	southern California black walnut	3”	4”	18”	28”
Malosma laurina	laurel sumac	6”	8”	36”	56”
Platanus racemosa	western sycamore	3”	4”	18”	28”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Populus trichocarpa	black cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Pseudotsuga macrocarpa	bigcone spruce	5”	7”	30”	47”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus berberidifolia	inland scrub oak	6”	8”	36”	56”
Quercus chrysolepis	canyon oak	6”	8”	36”	56”
Quercus douglasii	blue oak	6”	8”	36”	56”
Quercus john-tuckeri	Tucker oak	6”	8”	36”	56”
Quercus lobata	Valley oak	6”	8”	36”	56”
Quercus palmeri	Palmer’s oak	6”	8”	36”	56”
Quercus wislizeni var. *wislizeni*	interior live oak	6”	8”	36”	56”
Salix exigua	narrowleaf / sandbar willow	3”	4”	18”	28”
Salix gooddingii	Goodding's black willow	3”	4”	18”	28”
Salix laevigata	red willow	3”	4”	18”	28”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”
Umbellularia californica	California bay	6”	8”	36”	56”

VALLEY OAKS SAVANNAH SEA

Scientific Name	Common Name	Protected DBH	2-trunk Protected DBH	Heritage DBH	2-trunk Heritage DBH
Acer macrophyllum	bigleaf maple	3”	4”	18”	28”
Cercocarpus betuloides	mountain mahogany	6”	8”	36”	56”
Heteromeles arbutifolia	toyon	6”	8”	36”	56”
Populus fremontii	Fremont cottonwood	3”	4”	18”	28”
Prunus ilicifolia	holly leaf cherry	3”	4”	18”	28”
Quercus agrifolia	coast live oak	6”	8”	36”	56”
Quercus john-tuckeri	Tucker oak	6”	8”	36”	56”
Quercus lobata	Valley oak	6”	8”	36”	56”
Salix lasiolepis	arroyo willow	3”	4”	18”	28”
Sambucus nigra ssp. *caerulea*	blue elderberry	6”	8”	36”	56”

Appendix C

Tree Information Matrix

Appendix C - Tree Information Matrix

| Tree No. | Common Name | Botanical Name | Stems | Individual Stem Diameters (in.) | | |

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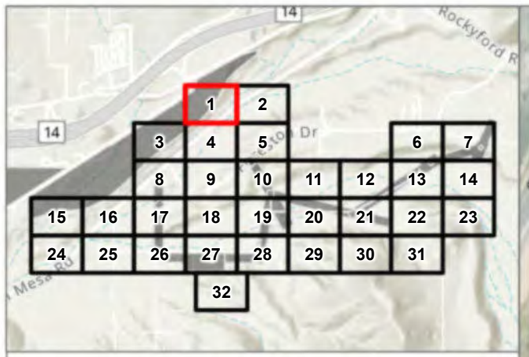
| Tree No. | Common Name | Botanical Name | Stems | Individual Stem Diameters (in.) | | |

Appendix D
Tree Impacts



Tree Potential Impacts

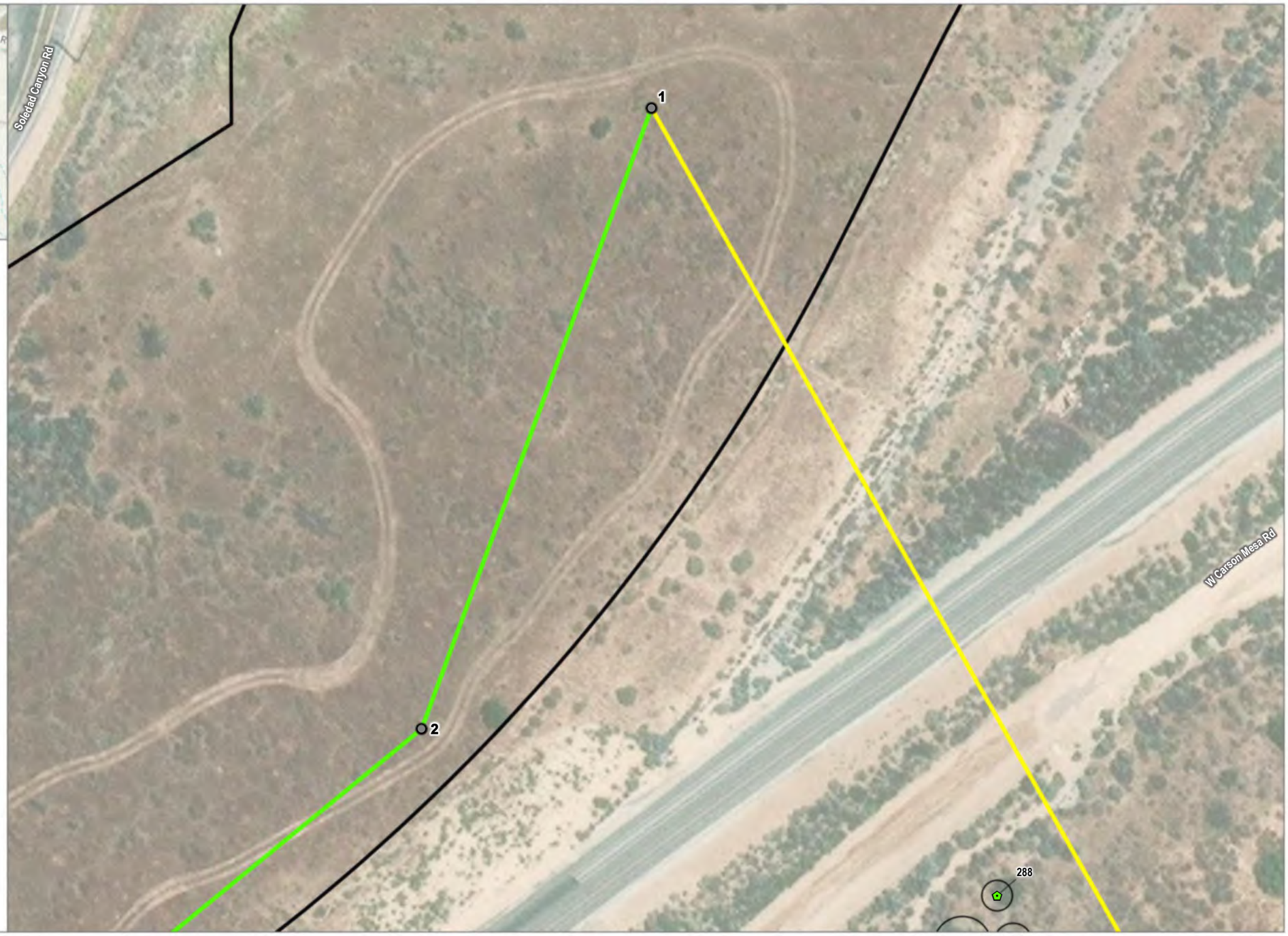
- No Impact
- Tree Protection Zone (TPZ)

Project Components

- Proposed BESS Facility Site
- Transmission Pole

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option
- Overhead Northern Gen-Tie Route Option



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX D1

Potential Tree Impacts

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

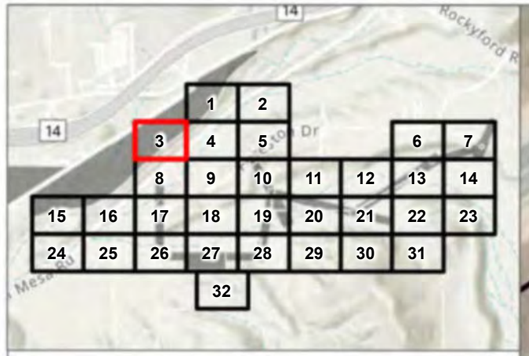
DUDEK

0 30 60 Feet

APPENDIX D2

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

Project Components

- Proposed BESS Facility Site
- Transmission Pole

Fiber Optic Routes

- Underground Fiber Optic Route

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

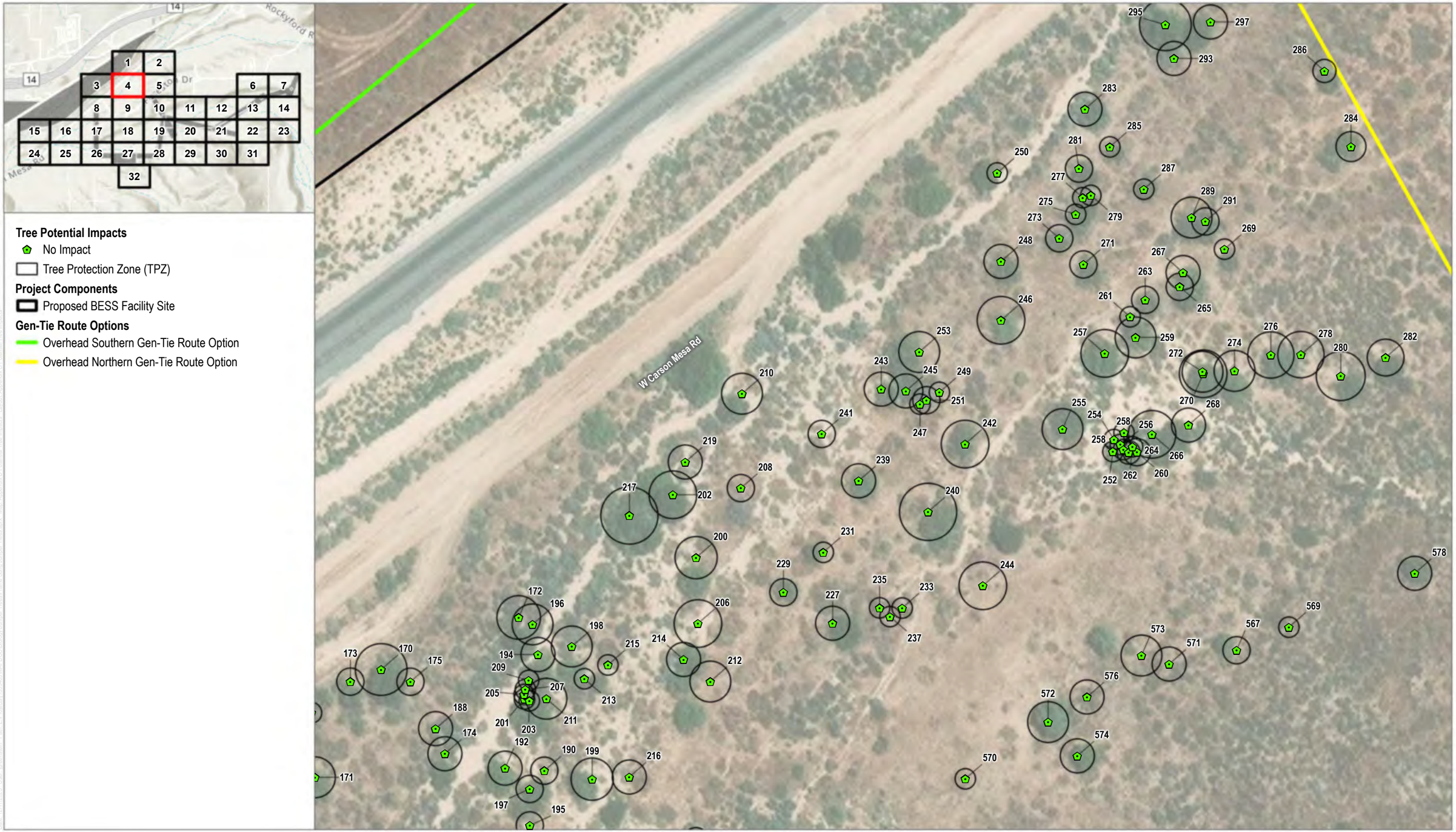
N

0 30 60 Feet

APPENDIX D3

Potential Tree Impacts

Prairie Song Reliability Project



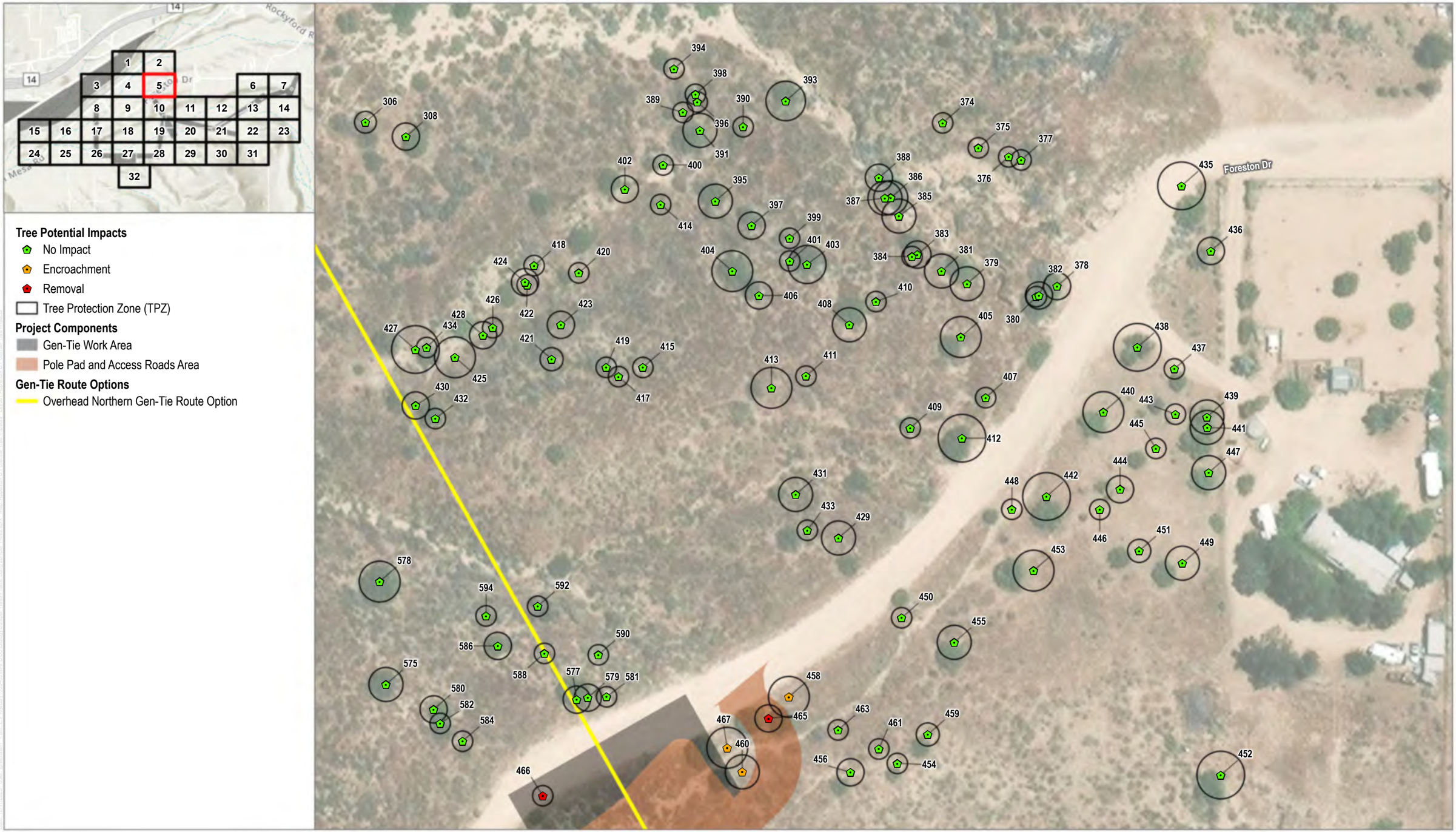
SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

APPENDIX D4

Potential Tree Impacts

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

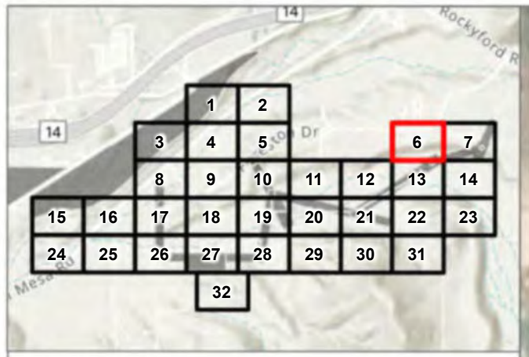
DUDEK

0 30 60 Feet

APPENDIX D5

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Removal
- Tree Protection Zone (TPZ)

Project Components

- Gen-Tie Work Area
- Pole Pad and Access Roads Area

Gen-Tie Routes

- Overhead Gen-Tie Route (SCE)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

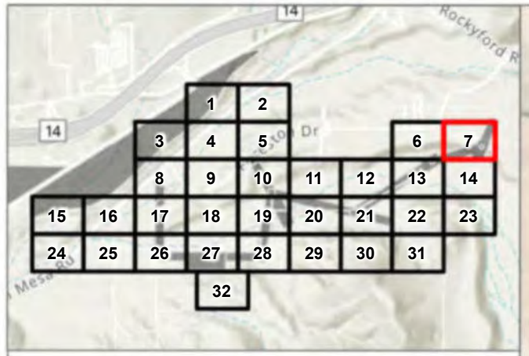
N

0 30 60 Feet

APPENDIX D6

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Encroachment
- Removal
- Tree Protection Zone (TPZ)

Project Components

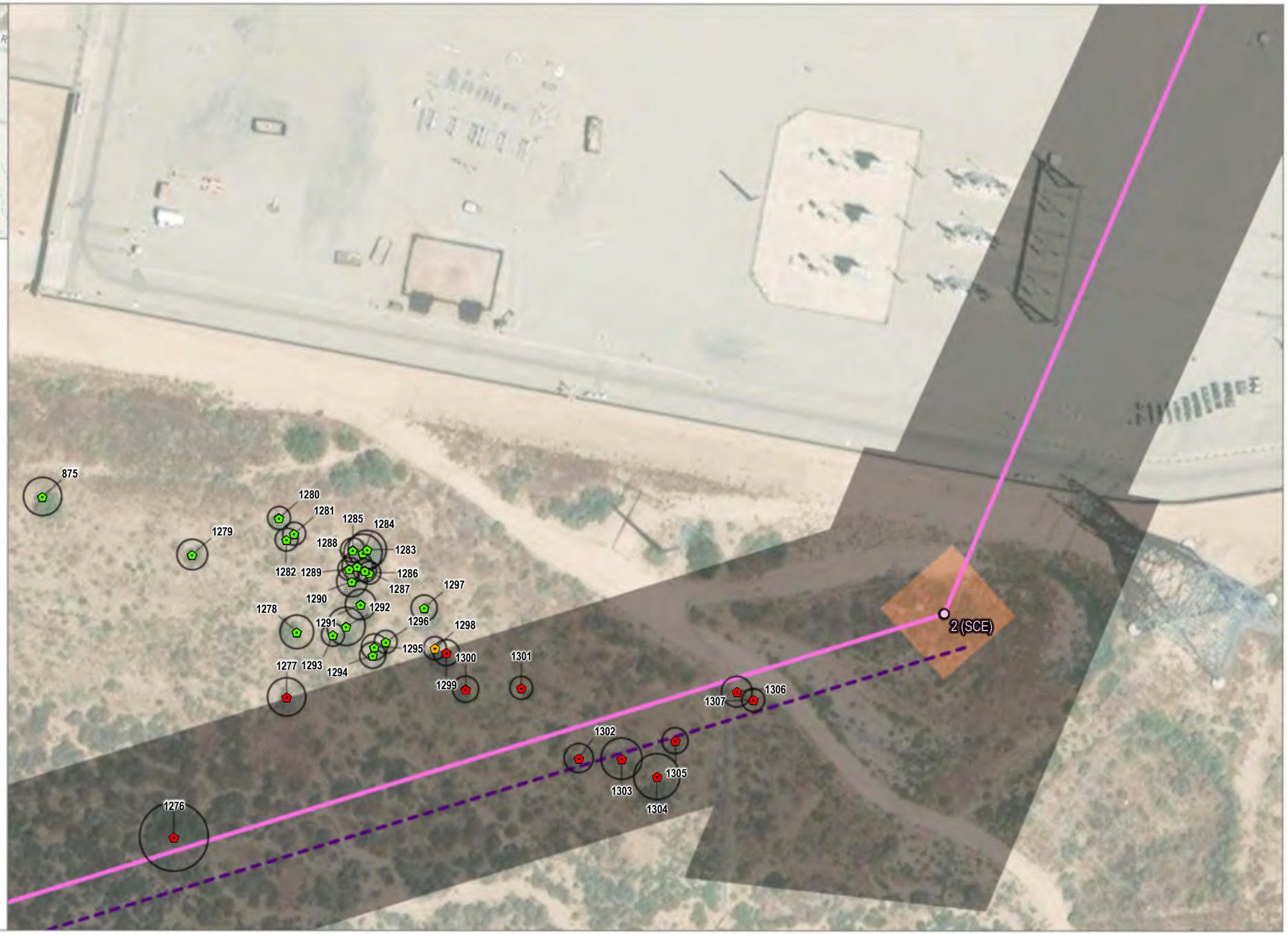
- Gen-Tie Work Area
- Pole Pad and Access Roads Area
- Transmission Pole (SCE)

Fiber Optic Routes

- Underground Fiber Optic Route (SCE)

Gen-Tie Routes

- Overhead Gen-Tie Route (SCE)



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX D7

Potential Tree Impacts

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

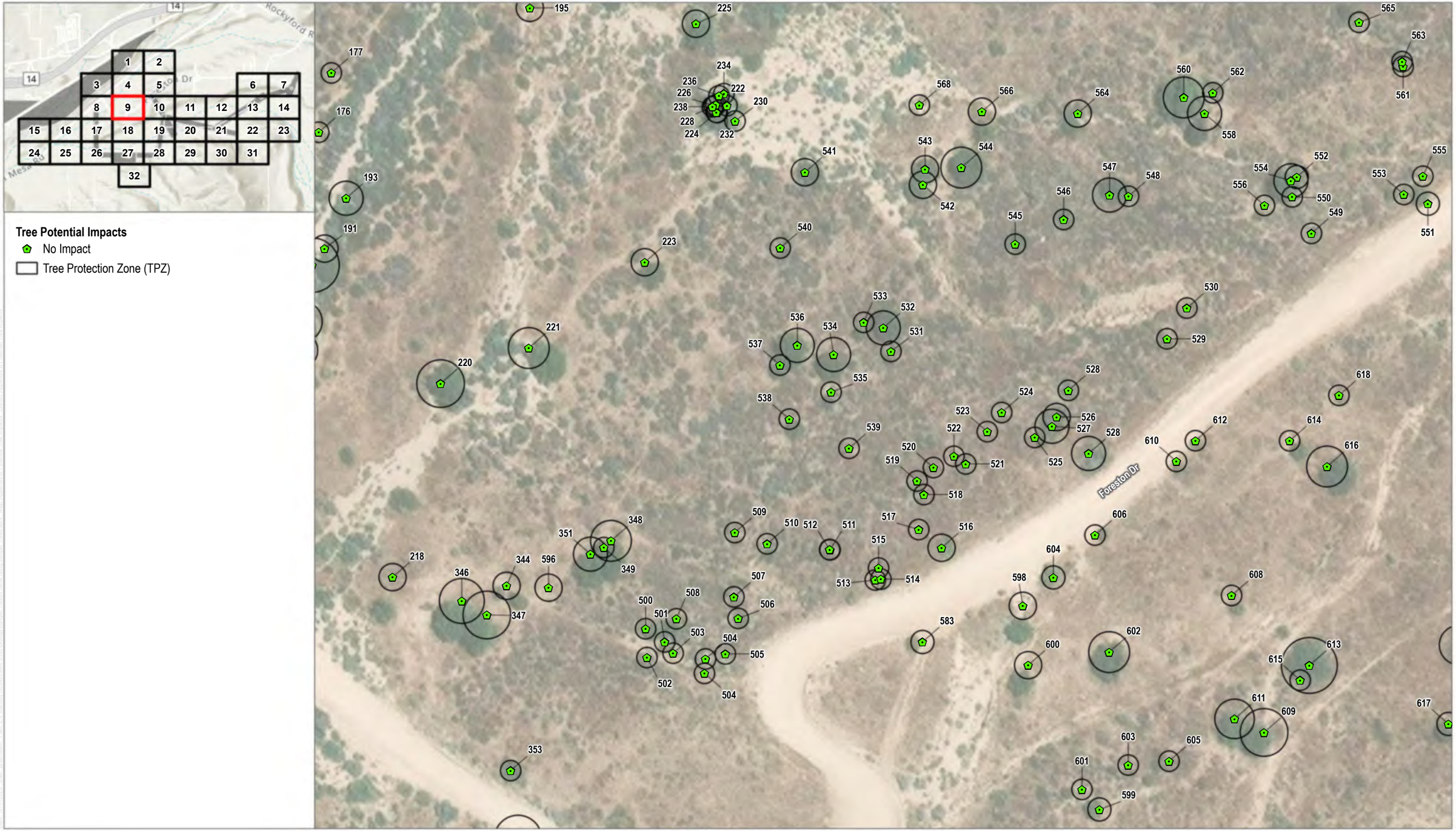
DUDEK

0 30 60 Feet

APPENDIX D8

Potential Tree Impacts

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

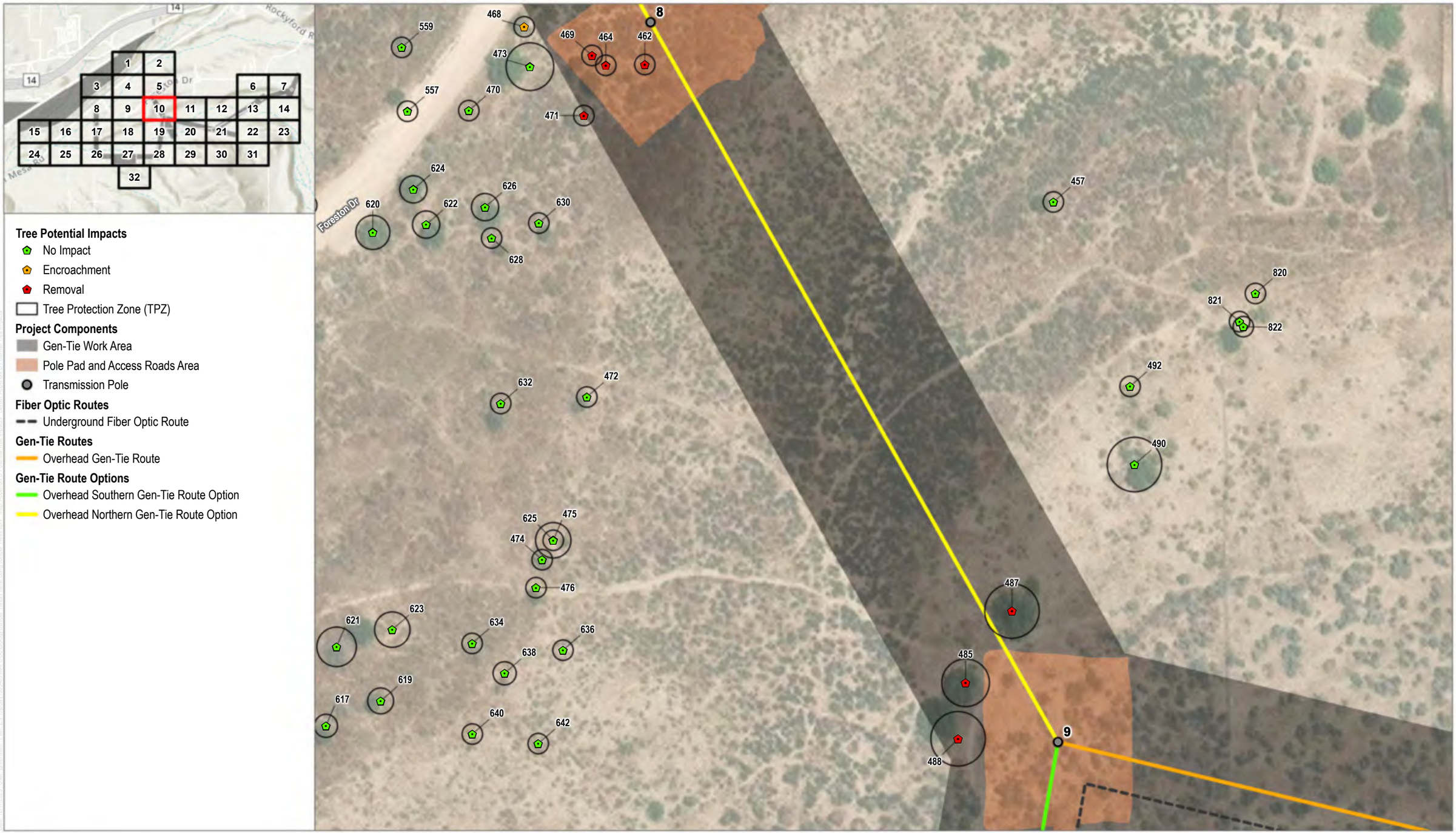
DUDEK

0 30 60 Feet

APPENDIX D9

Potential Tree Impacts

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

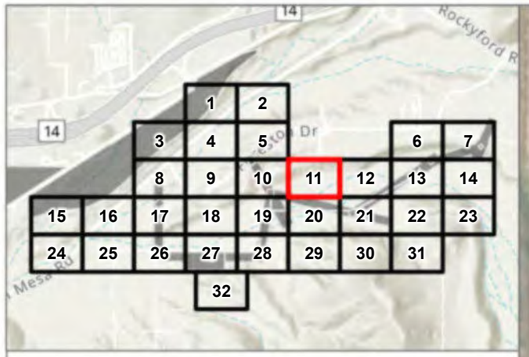
DUDEK

0 30 60 Feet

APPENDIX D10

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

Project Components

- Gen-Tie Work Area

817
816
815
814
813
827
828
812
826
825
824
823
811
833
831
832

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D11

Potential Tree Impacts

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

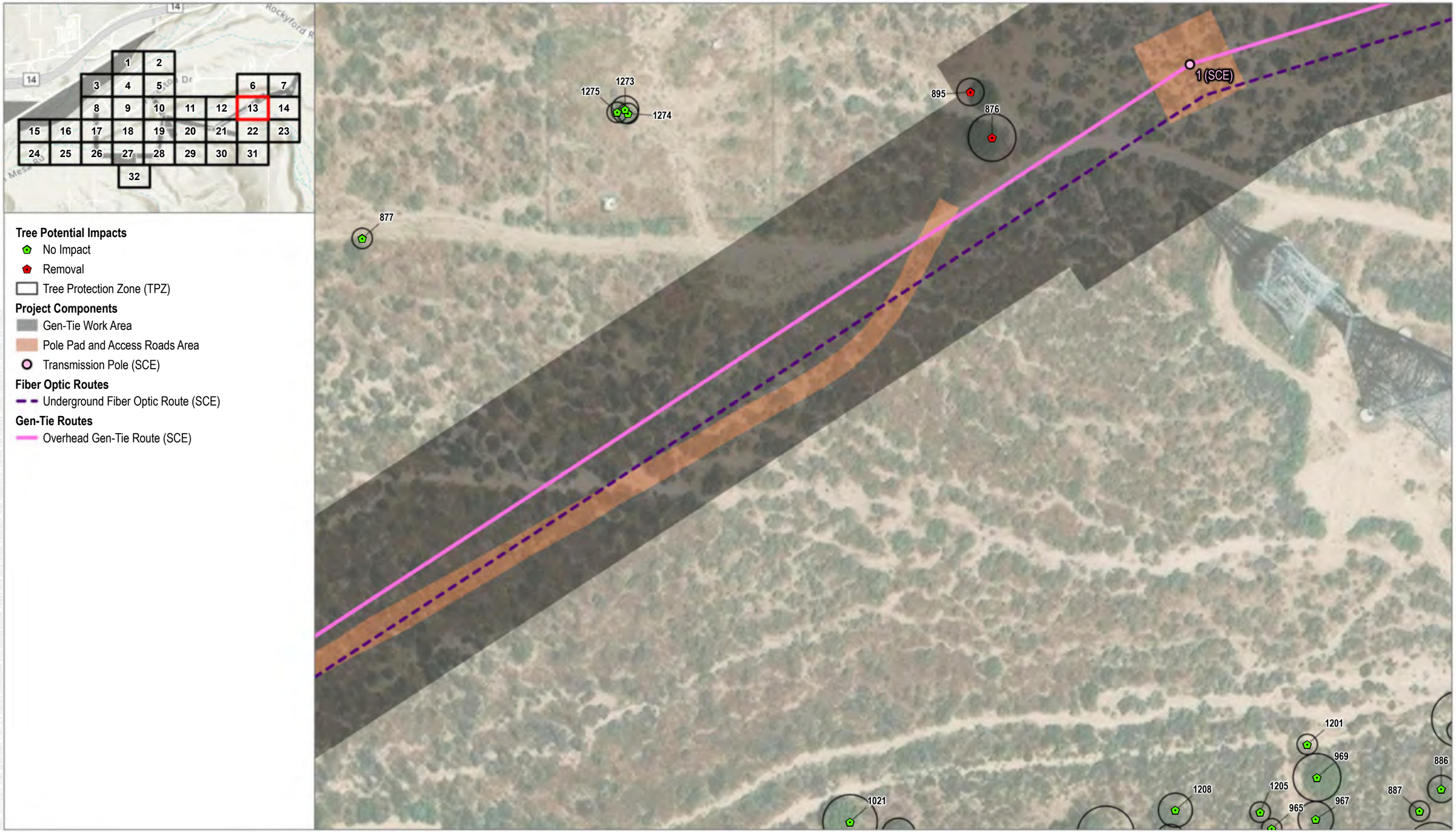
DUDEK

0 30 60 Feet

APPENDIX D12

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Removal
- Tree Protection Zone (TPZ)

Project Components

- Gen-Tie Work Area
- Pole Pad and Access Roads Area
- Transmission Pole (SCE)

Fiber Optic Routes

- Underground Fiber Optic Route (SCE)

Gen-Tie Routes

- Overhead Gen-Tie Route (SCE)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D13

Potential Tree Impacts

Prairie Song Reliability Project

Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

Project Components

- Gen-Tie Work Area

Fiber Optic Routes

- Underground Fiber Optic Route (SCE)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

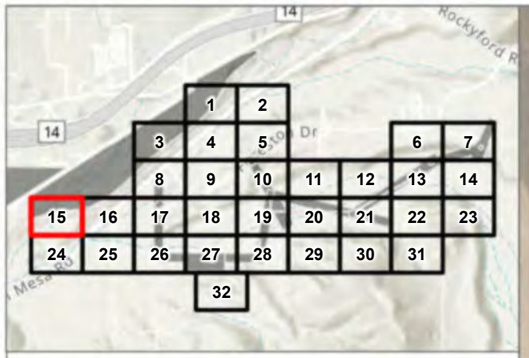
DUDEK

0 30 60 Feet

APPENDIX D14

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

Project Components

- Proposed BESS Facility Site

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

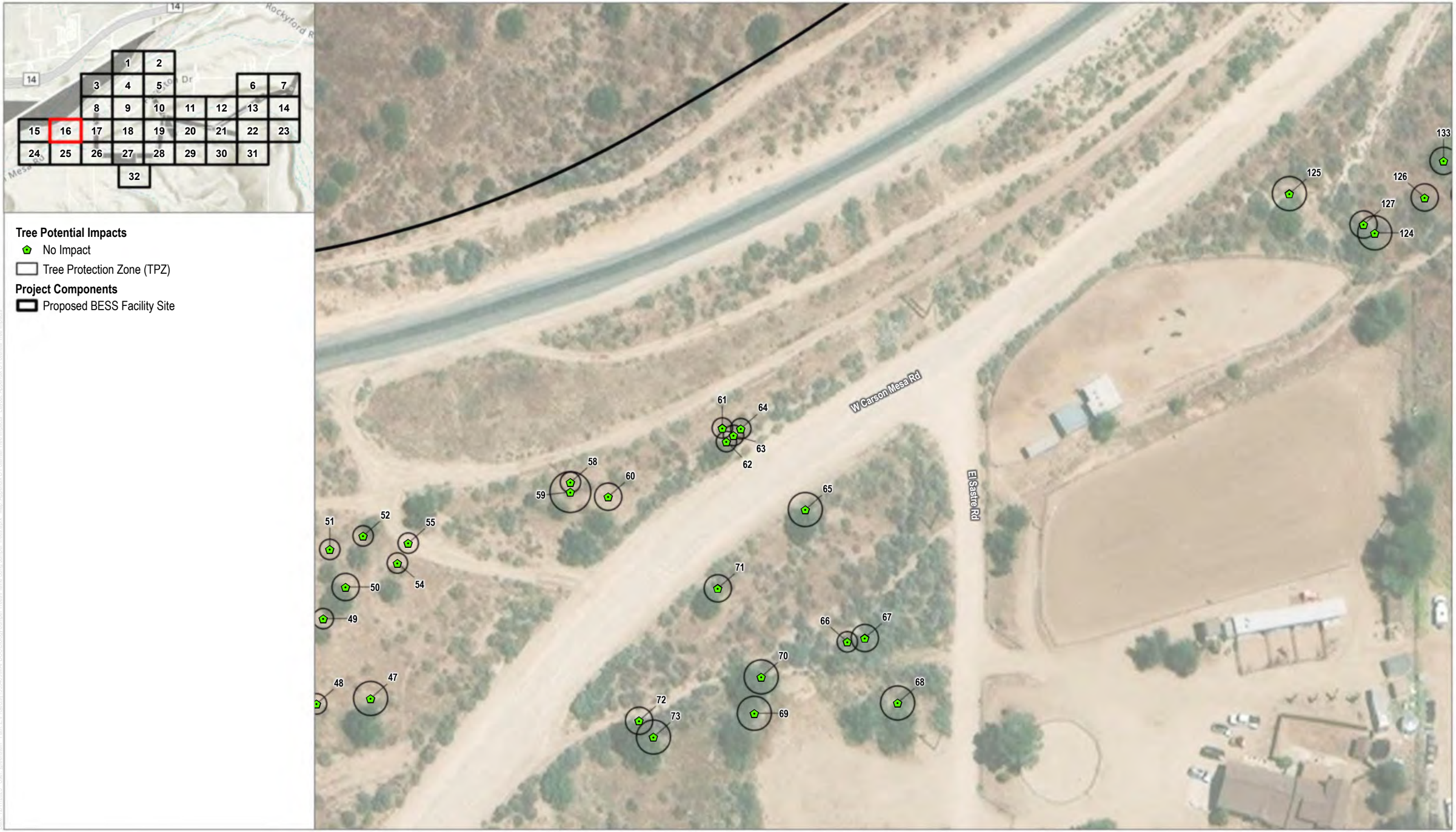
DUDEK

0 30 60 Feet

APPENDIX D15

Potential Tree Impacts

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D16

Potential Tree Impacts

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

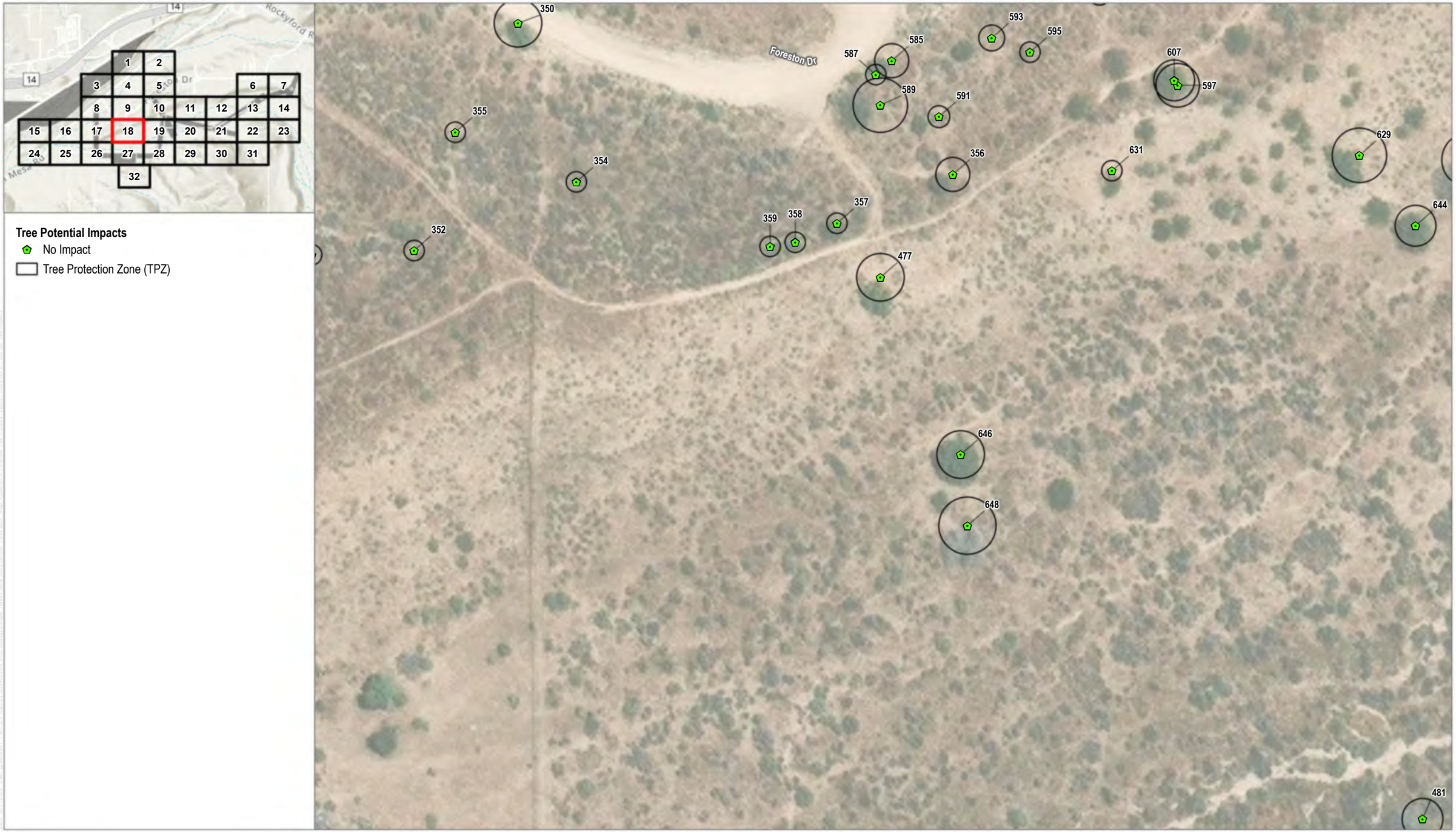
DUDEK

0 30 60 Feet

APPENDIX D17

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

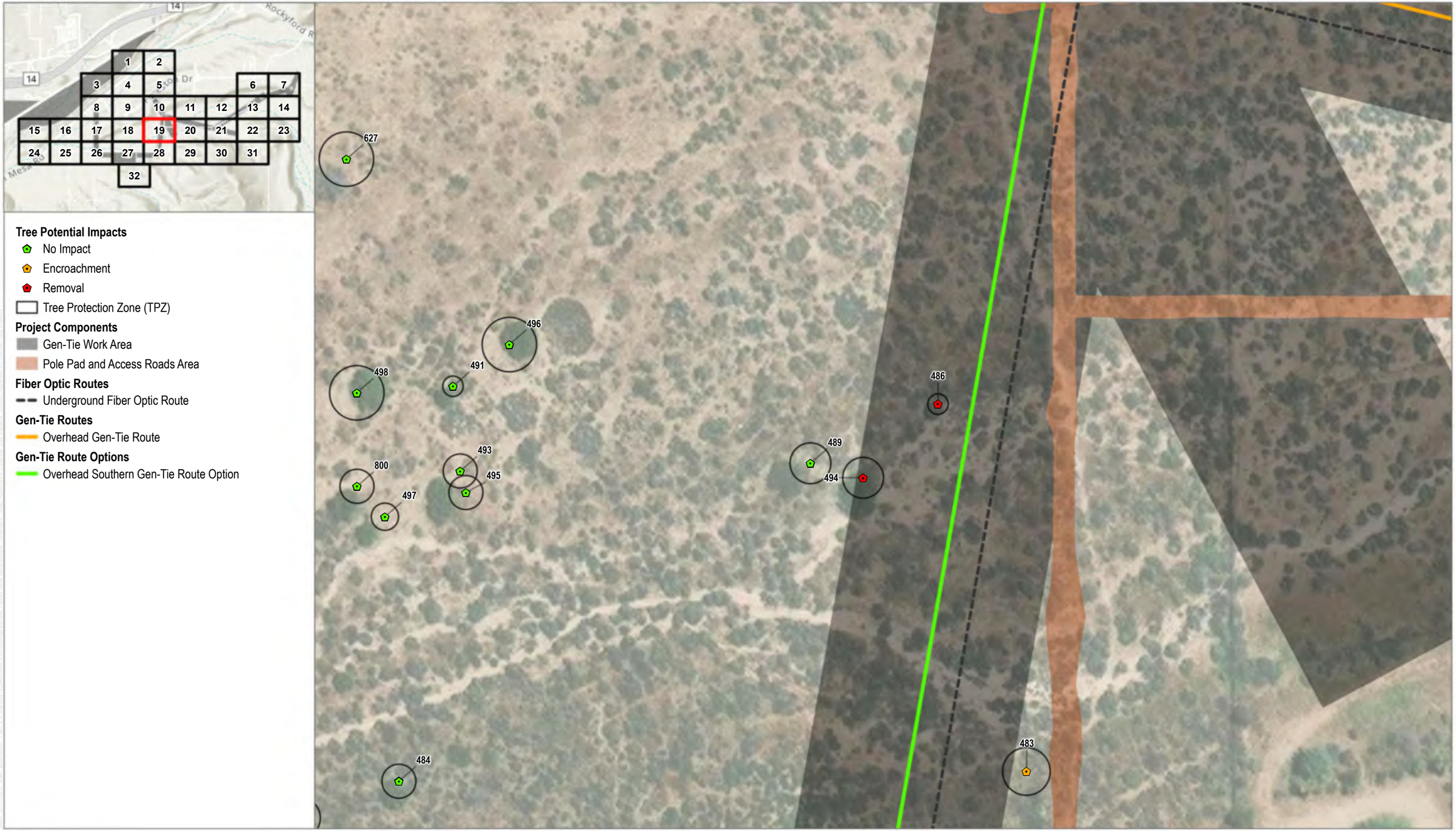
DUDEK

0 30 60 Feet

APPENDIX D18

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Encroachment
- Removal
- Tree Protection Zone (TPZ)

Project Components

- Gen-Tie Work Area
- Pole Pad and Access Roads Area

Fiber Optic Routes

- Underground Fiber Optic Route

Gen-Tie Routes

- Overhead Gen-Tie Route

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D19

Potential Tree Impacts

Prairie Song Reliability Project

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

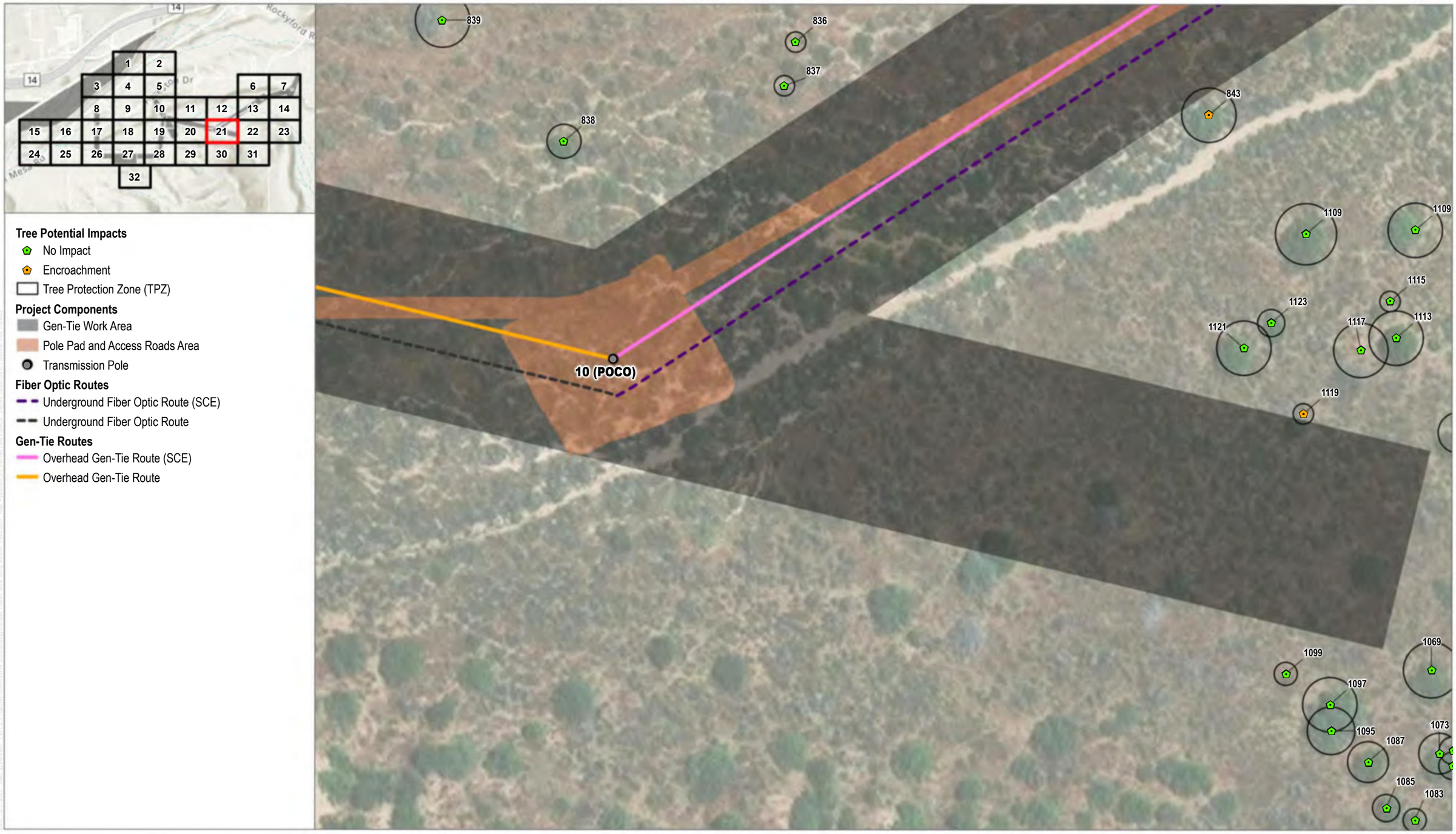
DUDEK

0 30 60 Feet

APPENDIX D20

Potential Tree Impacts

Prairie Song Reliability Project



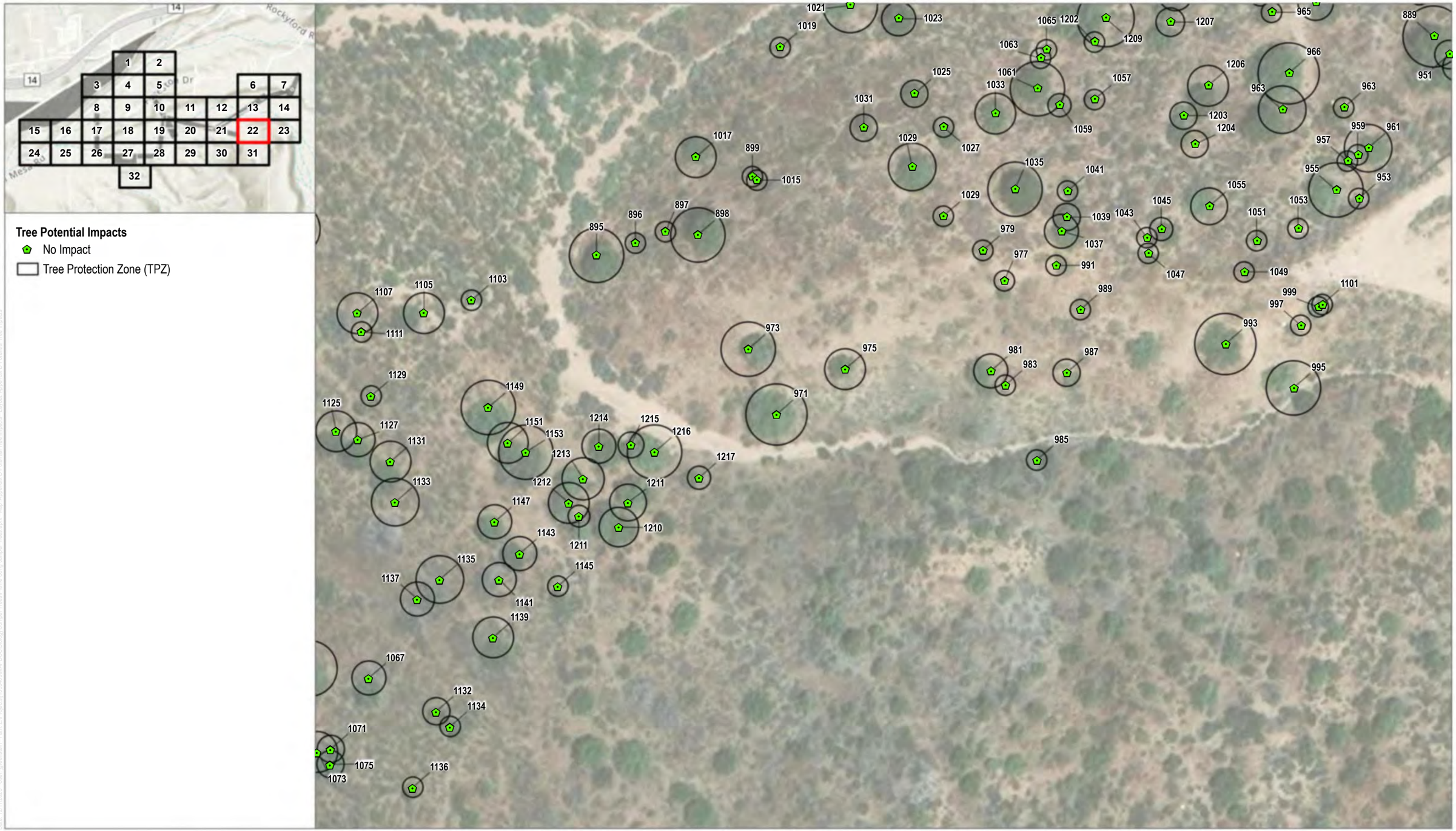
SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

APPENDIX D21

Potential Tree Impacts

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D22

Potential Tree Impacts

Prairie Song Reliability Project

Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D23

Potential Tree Impacts

Prairie Song Reliability Project

Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX D24

Potential Tree Impacts

Prairie Song Reliability Project

Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

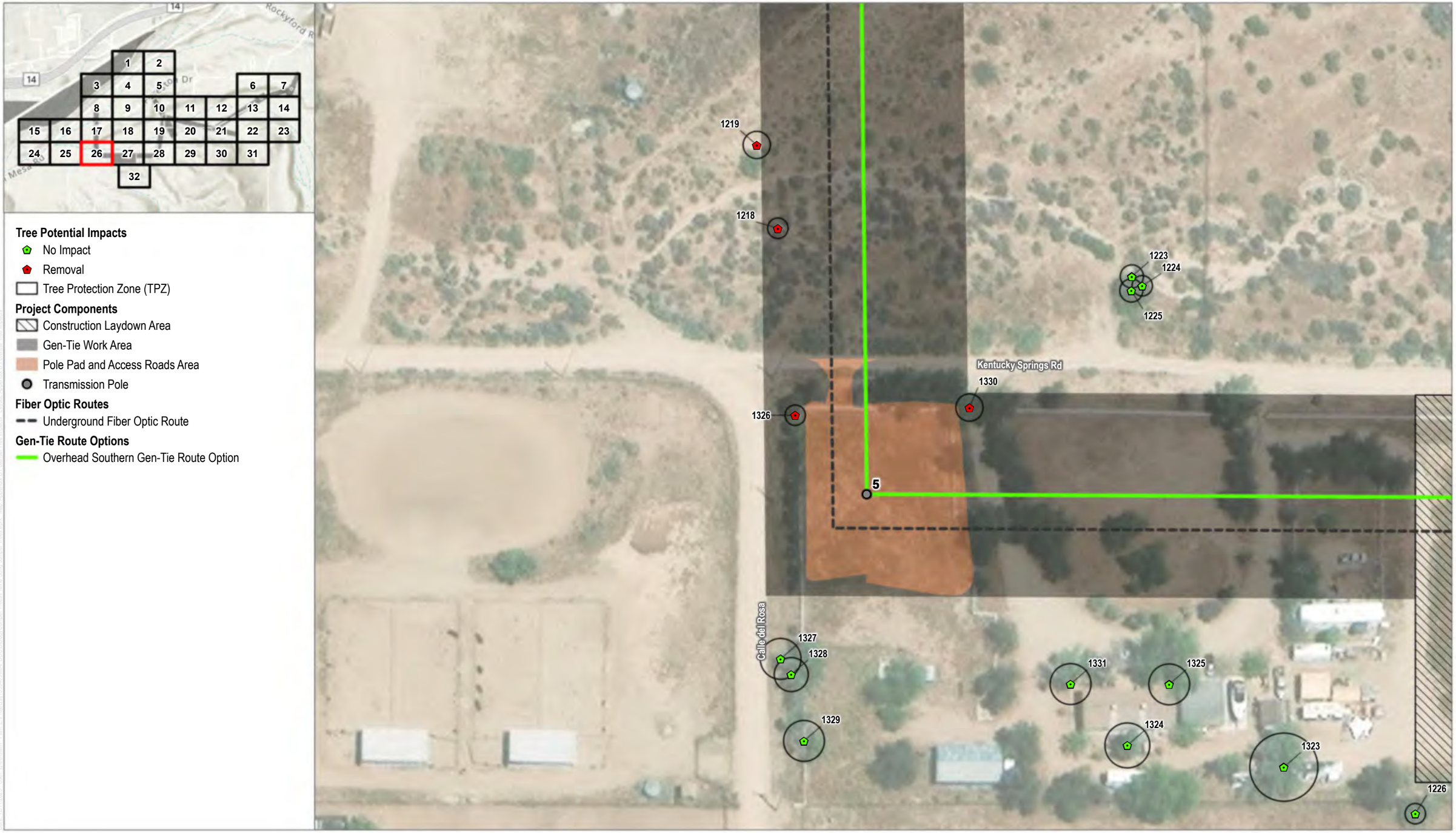
DUDEK

0 30 60 Feet

APPENDIX D25

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Removal
- Tree Protection Zone (TPZ)

Project Components

- Construction Laydown Area
- Gen-Tie Work Area
- Pole Pad and Access Roads Area
- Transmission Pole

Fiber Optic Routes

- Underground Fiber Optic Route

Gen-Tie Route Options

- Overhead Southern Gen-Tie Route Option

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

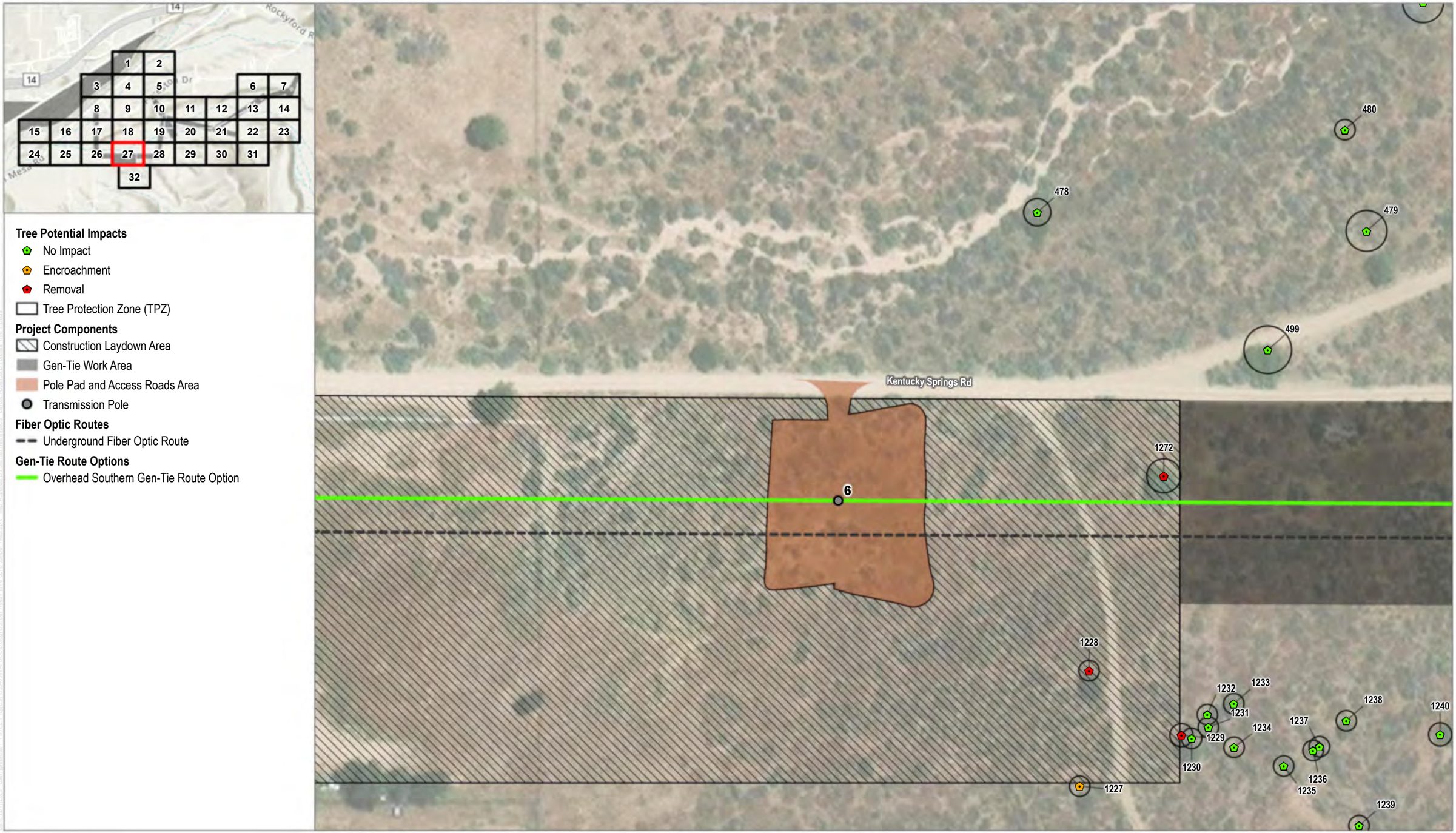
N

0 30 60 Feet

APPENDIX D26

Potential Tree Impacts

Prairie Song Reliability Project



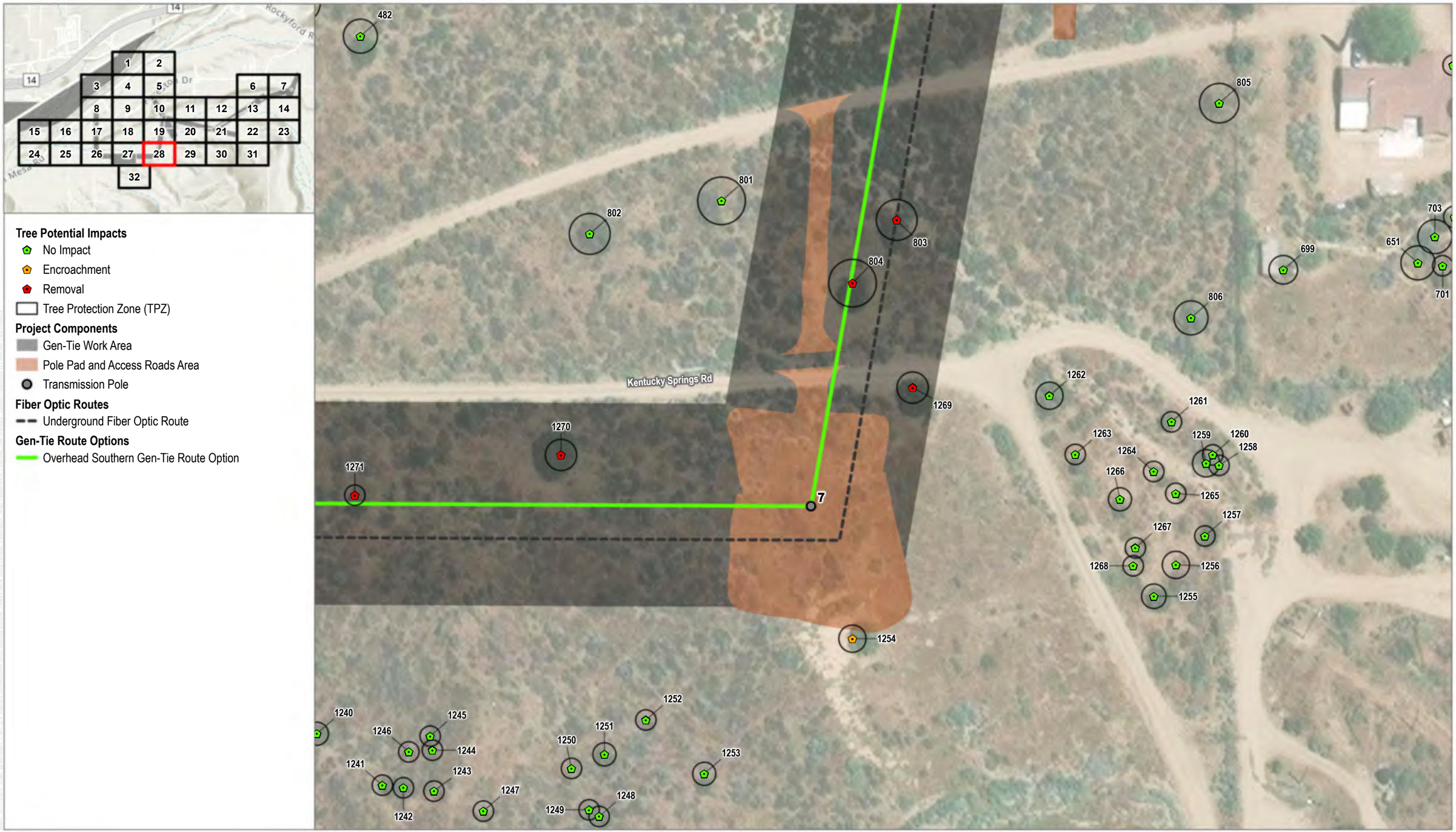
SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

APPENDIX D27

Potential Tree Impacts

Prairie Song Reliability Project



SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

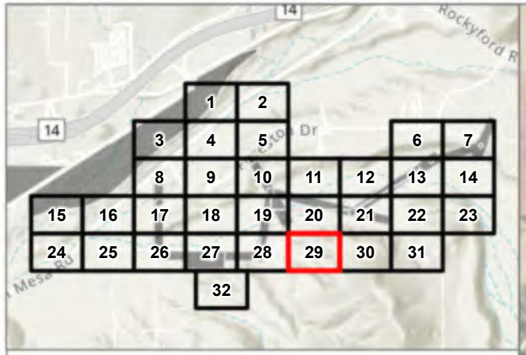
DUDEK

0 30 60 Feet

APPENDIX D28

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D29

Potential Tree Impacts

Prairie Song Reliability Project

Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

0 30 60 Feet

APPENDIX D30

Potential Tree Impacts

Prairie Song Reliability Project

Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

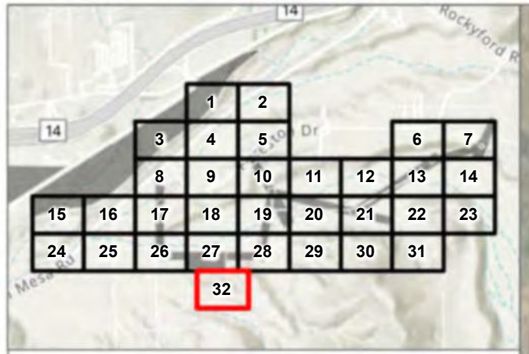
N

0 30 60 Feet

APPENDIX D31

Potential Tree Impacts

Prairie Song Reliability Project



Tree Potential Impacts

- No Impact
- Tree Protection Zone (TPZ)

SOURCE: Maxar 2024; Open Street Map 2024; Sargent & Lundy 2024

DUDEK

N

0 30 60 Feet

APPENDIX D32

Potential Tree Impacts

Prairie Song Reliability Project

Appendix E
Tree Protection Measures

Tree Protection Measures

The following tree protection measures are provided as general guidelines for tree protection from construction impacts. The measures presented should be monitored by arborists and enforced by contractors and developers for maximum benefit to the trees.

Tree Protection Measures Prior to Construction

Prior to any construction activity (drainage, demolition, material removal or delivery), Protected Trees with canopies located within 100 feet of any active construction activity in the Santa Clara River SEA shall be protected by fencing and signage. All contractors shall be made aware of the tree protection measures. A project arborist shall be assigned to monitor tree health and construction activity near retained trees on site. The project arborist shall be an International Society of Arboriculture (ISA) Certified Arborist.

Fencing. High-visibility orange construction fencing, not less than 4 feet in height and equipped with tree protection signage, shall be installed around all trees (or tree groups) with canopies that fall within 100 feet of active construction activity in the Santa Clara River SEA. The fencing shall be placed at the boundary of the Tree Protection Zone (TPZ), defined as a minimum distance of fifteen (15') feet from the trunk of the tree or five (5') feet outside the drip line of the tree, whichever distance is greater. For any trees that would be encroached upon by construction activities, fencing shall be placed as far away from trunk of the tree as possible while still allowing the required construction activities to proceed. This fencing will delineate the tree protection zone and prevent unwanted activity in and around the trees in order to reduce soil compaction in the root zones of the trees and other damage from heavy equipment.

Fencing shall be secured to 6-foot heavy-gauge t-bar line posts, supported by an appropriate grade level concrete base and spaced no more than eight feet apart. Fencing material shall be fastened to each post using minimum 14-gauge wire at the top, middle, and bottom. Tree protection signs should be attached to every fourth post. The contractor shall maintain the fence to keep it upright, taut, and aligned at all times during construction activities in the area of the protected trees. Fencing shall be removed only after all construction activities are complete.

Pre-Construction Meeting. A pre-construction meeting shall be held between all contractors and the arborist. The arborist will instruct the contractors on tree protection practices and answer any questions. All equipment operators and spotters, assistants, or those directing operators from the ground, shall provide written acknowledgement of their receiving tree protection training. This training shall include information on the location and marking of protected trees, the necessity of preventing damage, and the discussion of work practices that will accomplish such.

Protection and Maintenance During Construction

Once construction activities have begun, the following measures shall be adhered to:

Avoidance: Signs, ropes, cables, or any other items shall not be attached to any tree.

Equipment Operation and Storage. Operating heavy machinery around the root zones of trees will increase soil compaction, which decreases soil aeration and subsequently reduces water penetration in the soil. All heavy equipment and vehicles shall stay out of the fenced tree protection zone, unless where specifically approved in writing by the project arborist.

Storage and Disposal. Do not store or discard any supply or material, including paint, lumber, concrete overflow, etc. within the fenced tree protection zone. Remove all foreign debris within the fenced tree protection zone; it is important to leave the duff, mulch, chips, and leaves around the retained trees for water retention and nutrient supply. Avoid draining or leakage of equipment fluids near retained trees. Fluids such as: gasoline, diesel, oils, hydraulics, brake and transmission fluids, paint, paint thinners, and glycol (anti-freeze) should be disposed of properly. Equipment should be parked at least 50 feet from the protected zone to avoid the possibility of leaking equipment fluids into the soil. The effect of toxic equipment fluids on the retained trees could result in tree decline and/or mortality.

Moving Construction Materials. Care will be taken when moving equipment or supplies near the trees, especially overhead. Avoid damaging the tree(s) when transporting or moving construction materials and working around retained trees (even outside of the fenced tree protection zone). Above ground tree parts that could be damaged (e.g., low limbs, trunks) should be flagged with red ribbon. If contact with the tree crown is unavoidable, prune the conflicting branch(es) using ISA or ANSI A300 standards.

Grade Changes. Grade changes, including adding fill, are not permitted within the tree protection zone, without special written authorization and under supervision by a Certified Arborist. Lowering the grade within this area will necessitate cutting main support and feeder roots, jeopardizing the health and structural integrity of the tree(s). Adding soil, even temporarily, on top of the existing grade will compact the soil further, and decrease both water and air availability to the trees' roots.

Trenching and Root Pruning. To minimize damage to the root systems of all trees not being removed, all trenching activities must be conducted with extreme care. Whenever possible, all services and utilities shall be routed around the fenced tree protection zone.

If excavation within the fenced tree protection zone is unavoidable, then every effort shall be made to tunnel under or through the tree's root system with a minimal amount of root pruning, rather than trench across the tree's roots. Tree roots primarily grow horizontally, forming a structural base similar to the stem of a wineglass. A Certified Arborist should oversee all root pruning activities to ensure cuts are clean and precise, minimizing tearing, fracturing, or other trauma to the root system.

Heavy equipment such as backhoes, dozers, or graders can cause severe root damage and should not be used within root protection zones. Soil removal in trench locations should be performed using hand tools in conjunction with root pruning or Air-Spade equipment. Trenches should be no deeper than necessary, and alternative methods to trenching should be considered whenever feasible.

If trenching within the fenced tree protection zone is unavoidable:

- All trenches must be hand-dug.
- No roots larger than two (2) inches in diameter may be cut unless no other alternative exists.
- Smaller roots must be saw-cut flush with the trench wall, mechanical trenchers or backhoes are prohibited.
- If trenching results in the separation of 25% or more of the root protection zone, the trench alignment must be modified, either relocated or installed using boring techniques.

Irrigation. Trees that have been substantially root pruned (25% or more of their root zone) will require irrigation for the first twelve months. The first irrigation should be within 48 hours of root pruning. They should be deep watered every two to four weeks during the summer and once a month during the winter (adjust accordingly with rainfall). One irrigation cycle should thoroughly soak the root zones of the trees to a depth of 3 feet. The soil should dry out between watering; avoid keeping a consistently wet soil. Designate one person to be responsible for irrigating (deep watering) the trees. Check soil moisture with a soil probe before irrigating. Irrigation is best accomplished by installing a temporary above ground micro-spray system that will distribute water slowly (to avoid runoff) and evenly throughout the fenced tree protection zone ***but never soaking the area located within 6- feet of the tree trunk***.

Pruning.

Pruning of the preserved trees is generally not permitted during construction activities, except in specific cases where pruning is necessary to:

- Provide clearance for roadway and transportation requirements when no alternative routes are feasible,
- Address visual obstructions that impact safety or visibility, or
- Facilitate removal of a failed stem.

These exceptions are intended to minimize conflict between tree canopy and construction operations while maintaining safety. No other pruning should be conducted until all construction is completed.

When pruning is deemed necessary, it must be:

- Pre-approved in writing by the project arborist or supervising authority,
- Conducted by an ISA Certified Arborist,
- Performed under the direct supervision of a Certified Arborist, and
- Executed in accordance with current ISA pruning standards, ensuring cuts are made properly to preserve tree structure, health, and aesthetics.

Pruning should be limited to the minimum necessary to achieve an objective as defined by the project arborist. The tree's canopy is a vital component of its health and longevity. Protecting it from avoidable damage is a key priority throughout the construction process, and all pruning activities must be carefully planned and executed to support the tree's long-term viability.

Washing. Periodic washing of the foliage of preserved trees located within 100 feet of construction activity in the Santa Clara River SEA is recommended during construction, no more than once every two weeks. Washing should include the upper and lower leaf surfaces and the tree bark. Washing will help control dirt/dust buildup that can lead to mite and insect infestations.

Inspection. An ISA Certified Arborist shall inspect the trees on at least a monthly basis for the duration of construction activity in an area 100 feet surrounding active construction. A summary report documenting observations and management recommendations shall be submitted to the owner following each inspection. Photographs of representative trees are to be included in each report.

Maintenance After Construction

Once construction is complete the tree protection fencing may be removed and the following measures performed to sustain and enhance the vigor of the preserved trees.

Pruning. Regular pruning of the preserved trees is not required. An ISA Certified Arborist, under the supervision of a Certified Arborist, should only prune the tree to maintain clearance and remove broken, dead, or diseased branches. No more than 15% of the canopy should be removed at one time. All pruning should conform to ISA standards.

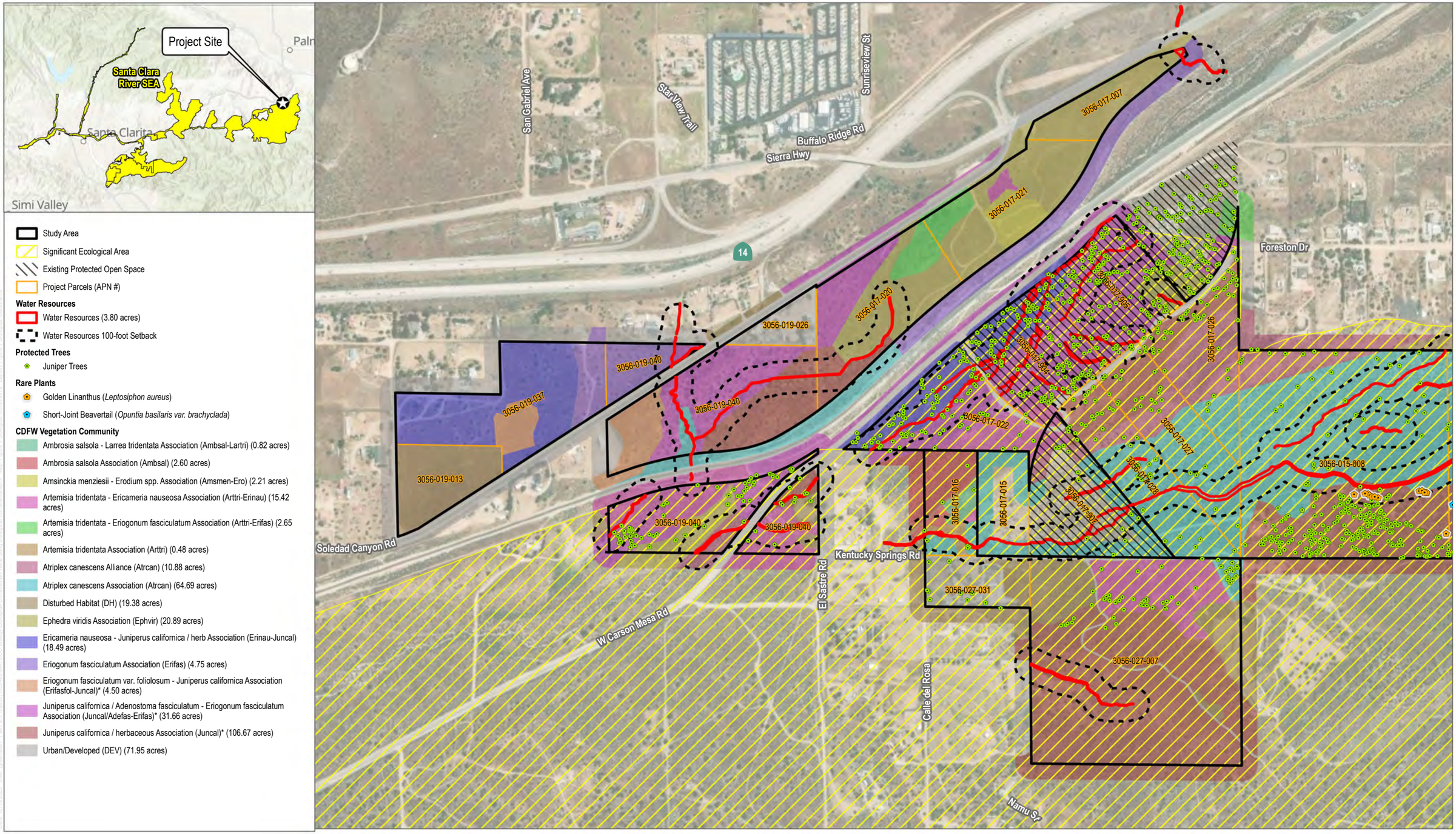
Watering. Retained trees on site shall be watered as they were prior to the commencement of construction activity. Supplemental irrigation may be necessary for twelve months following substantial root pruning.

Watering Adjacent Plant Material. All plants near the trees shall be compatible with water requirements of said trees. Watering regime included in the site's landscape plan shall be developed with consideration for the water needs of retained trees.

Spraying. If the trees are maintained in a healthy state, regular spraying for insect or disease control should not be necessary. If a problem does develop, an ISA Certified Arborist should be consulted; the trees may require application of insecticides to prevent the intrusion of bark-boring beetles and other invading pests. All chemical spraying should be performed by a licensed applicator under the direction of a licensed pest control advisor.

Inspection. All trees within 100 feet of construction activity in the Santa Clara River SEA shall be monitored by an ISA Certified Arborist for the first two years after construction completion. An annual monitoring report shall be submitted to the California Energy Commission (CEC). Each report shall summarize the inspection efforts, document observations and management actions taken, include photographs of each tree, and compare postconstruction tree conditions with the original, pre-construction baseline condition. If any retained trees die within this inspection period, they shall be replaced at a ratio approved by the CEC.

Appendix B
Biological Constraints Map



Study Area
Significant Ecological Area
Existing Protected Open Space
Project Parcels (APN #)

Water Resources
- Water Resources (3.80 acres)
- Water Resources 100-foot Setback

Protected Trees
- Juniper Trees

Rare Plants
- Golden Linanthus (*Leptosiphon aureus*)
- Short-Joint Beavertail (*Opuntia basilaris var. brachyclada*)

CDFW Vegetation Community
- Ambrosia salsola - Larrea tridentata Association (Ambsal-Lartri) (0.82 acres)
- Ambrosia salsola Association (Ambsal) (2.60 acres)
- Amsinckia menziesii - Erodium spp. Association (Amsmen-Ero) (2.21 acres)
- Artemisia tridentata - Ericameria nauseosa Association (Arttri-Erinau) (15.42 acres)
- Artemisia tridentata - Eriogonum fasciculatum Association (Arttri-Erifas) (2.65 acres)
- Artemisia tridentata Association (Arttri) (0.48 acres)
- Atriplex canescens Alliance (Atrcan) (10.88 acres)
- Atriplex canescens Association (Atrcan) (64.69 acres)
- Disturbed Habitat (DH) (19.38 acres)
- Ephedra viridis Association (Ephvir) (20.89 acres)
- Ericameria nauseosa - Juniperus californica / herb Association (Erinau-Juncal) (18.49 acres)
- Eriogonum fasciculatum Association (Erifas) (4.75 acres)
- Eriogonum fasciculatum var. foliolosum - Juniperus californica Association (Erifasfol-Juncal)* (4.50 acres)
- Juniperus californica / Adenostoma fasciculatum - Eriogonum fasciculatum Association (Juncal/Adefas-Erifas)* (31.66 acres)
- Juniperus californica / herbaceous Association (Juncal)* (106.67 acres)
- Urban/Developed (DEV) (71.95 acres)

SOURCE: Maxar 2024; Los Angeles County 2025

DUDEK

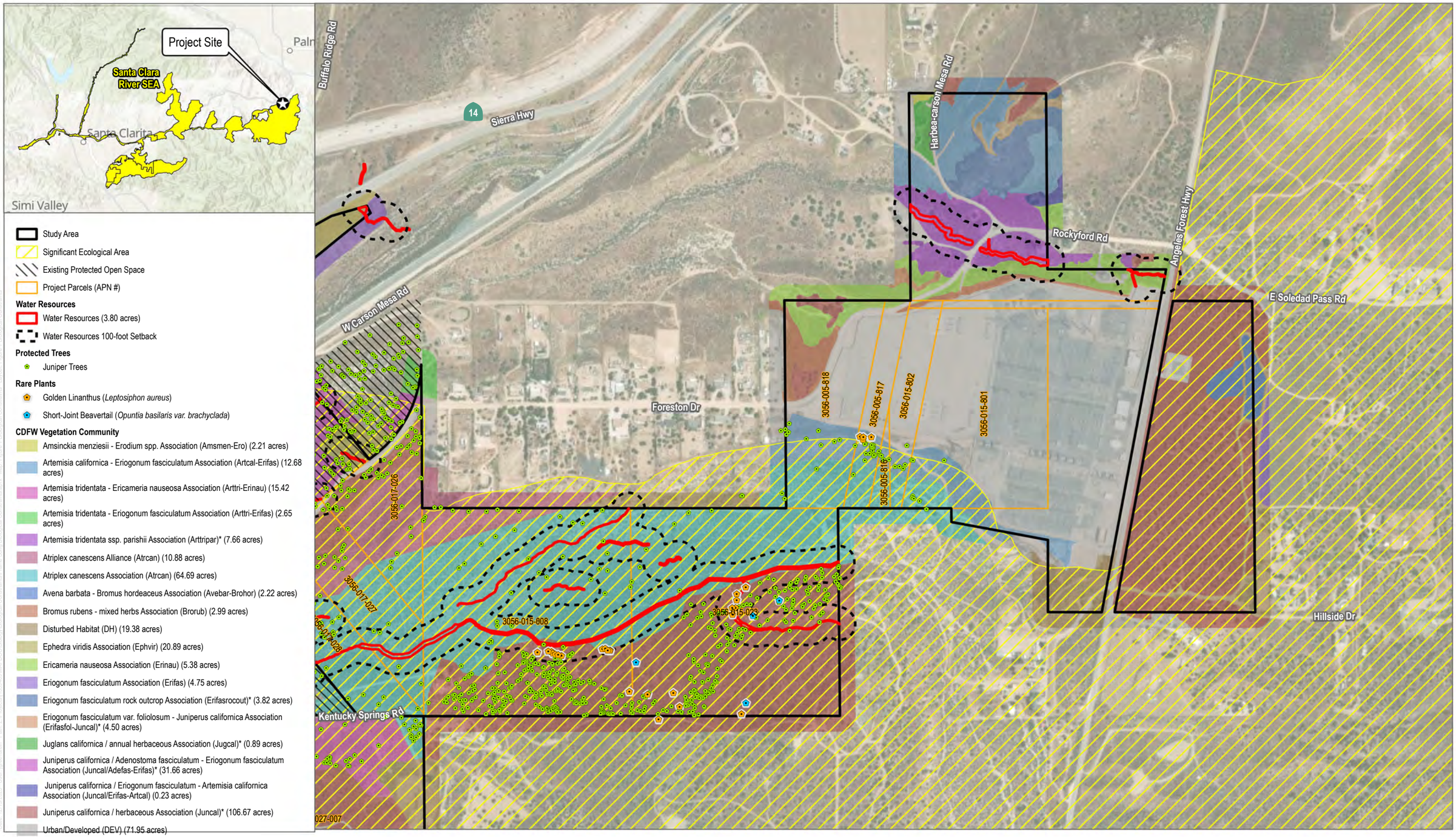
N

0 300 600 Feet

FIGURE 1A

Biological Constraints

Prairie Song Reliability Project



- Study Area
- Significant Ecological Area
- Existing Protected Open Space
- Project Parcels (APN #)

Water Resources

- Water Resources (3.80 acres)
- Water Resources 100-foot Setback

Protected Trees

- Juniper Trees

Rare Plants

- Golden Linanthus (*Leptosiphon aureus*)
- Short-Joint Beavertail (*Opuntia basilaris var. brachyclada*)

CDFW Vegetation Community

- Amsinckia menziesii - Erodium spp. Association (Amsmen-Ero) (2.21 acres)
- Artemisia californica - Eriogonum fasciculatum Association (Artcal-Erifas) (12.68 acres)
- Artemisia tridentata - Ericameria nauseosa Association (Arttri-Erinau) (15.42 acres)
- Artemisia tridentata - Eriogonum fasciculatum Association (Arttri-Erifas) (2.65 acres)
- Artemisia tridentata ssp. parishii Association (Arttripar)* (7.66 acres)
- Atriplex canescens Alliance (Atrcan) (10.88 acres)
- Atriplex canescens Association (Atrcan) (64.69 acres)
- Avena barbata - Bromus hordeaceus Association (Avebar-Brohor) (2.22 acres)
- Bromus rubens - mixed herbs Association (Brorub) (2.99 acres)
- Disturbed Habitat (DH) (19.38 acres)
- Ephedra viridis Association (Ephvir) (20.89 acres)
- Ericameria nauseosa Association (Erinau) (5.38 acres)
- Eriogonum fasciculatum Association (Erifas) (4.75 acres)
- Eriogonum fasciculatum rock outcrop Association (Erifasrocout)* (3.82 acres)
- Eriogonum fasciculatum var. foliolosum - Juniperus californica Association (Erifasfol-Juncal)* (4.50 acres)
- Juglans californica / annual herbaceous Association (Jugcal)* (0.89 acres)
- Juniperus californica / Adenostoma fasciculatum - Eriogonum fasciculatum Association (Juncal/Adefas-Erifas)* (31.66 acres)
- Juniperus californica / Eriogonum fasciculatum - Artemisia californica Association (Juncal/Erifas-Artcal) (0.23 acres)
- Juniperus californica / herbaceous Association (Juncal)* (106.67 acres)
- Urban/Developed (DEV) (71.95 acres)

SOURCE: Maxar 2024; Los Angeles County 2025

DUDEK

0 300 600 Feet

FIGURE 1B

Biological Constraints

Prairie Song Reliability Project

Appendix C

Potential to Occur Tables and Compendia

Potential to Occur Tables

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the California Environmental Quality Act Guidelines (CEQA) (14 CCR 15000 et seq.) are referred to as "special-status plant species" and, as used in this document, include (1) plant species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act[1] (FESA); and/or (2) plant species with a California Rare Plant Rank as designated by the California Native Plant Society[2].

Endangered, rare, or threatened wildlife species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR Section 15380(b)), are referred to as "special-status wildlife species" and, as used in this document, include (1) wildlife species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of CESA and FESA[3]; (2) California Species of Special Concern as designated by the California Department of Fish and Wildlife[4]; and (3) mammals and birds that are fully protected species as described in the California Fish and Game Code, Sections 4700 and 3511[5].

The potential for special-status plant species to occur within the Study Area was assessed based on known geographic and elevation ranges as well as habitat and soil conditions that are known to support species occurring in the region. Potential for special-status wildlife species to occur within the Study Area was assessed based on known geographic ranges, the presence/absence of suitable habitat, and other natural history elements that might predict their occurrence. After completion of the reconnaissance surveys, the potential for special-status plant and wildlife species to occur on or near the Project site was summarized according to the following categories. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided:

- Known to occur: the species has been documented on the property by a reliable source.
- High potential to occur: the species has not been documented on the property but is known to recently occur in the vicinity and suitable habitat is present.
- Moderate potential to occur: the species has not been documented on the property or in the vicinity, but the site is within the known range of the species and suitable habitat for the species is present.
- Low potential to occur: the species has not been documented in the vicinity or on the property, but the site is within the known range of the species; however, suitable habitat for the species on site is of low quality.
    - A low potential to occur is also given to species that have suitable habitat present and the site is within the geographic and elevation range of the species, but the species was not observed during surveys that were conducted during the species' blooming period.
- Not expected to occur: the property is outside the known geographic or elevational range of the species and/or the site does not support suitable habitat for the species.

[1] CDFW. 2025. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Accessed April 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.
[2] CNPS. 2025. Inventory of Rare and Endangered Plants (online edition, v8-03). Accessed April 2025. www.rareplants.cnps.org.
[3] CDFW. 2025. State and Federally Listed Endangered and Threatened Animals of California. Accessed April 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline.
[4] CDFW. 2025. Species of Special Concern. Accessed April 2025. https://www.wildlife.ca.gov/Conservation/SSC.
[5] CDFW. 2025h. Fully Protected Animals. Accessed April 2025. https://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html.

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Special-Status Plants

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Acanthoscyphus parishii var. *abramsii*	Abrams' oxytheca	None/None/1B.2	Chaparral/annual herb/June–Aug/ 3,750–6,745	Not expected to occur. The Study Area is outside this species current range.
Androsace elongata ssp. *acuta*	California androsace	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland/annual herb/ Mar–June/490–4,280	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Anomobryum julaceum	slender silver moss	None/None/4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; Roadsides (usually)/moss/N.A./330–3,280	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Aphyllon validum ssp. *validum*	Rock Creek broomrape	None/None/1B.2	Chaparral, Pinyon and juniper woodland; Granitic/perennial herb (parasitic)/May–Sep/3,380–6,560	Not expected to occur. Suitable micro-habitat (granitic) for the species is not present in the Study Area.
Arctostaphylos glandulosa ssp. *gabrielensis*	San Gabriel manzanita	None/None/1B.2	Chaparral/perennial evergreen shrub/ Mar/1,950–4,920	Not expected to occur. This conspicuous species was not observed in the Study Area.
Arctostaphylos parryana ssp. *tumescens*	interior manzanita	None/None/4.3	Chaparral (montane), Cismontane woodland/perennial evergreen shrub/ Feb–Apr/6,890–7,580	Not expected to occur. This conspicuous species was not observed in the Study Area.
Asplenium vespertinum	western spleenwort	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub; Rocky/perennial rhizomatous herb/Feb–June/ 590–3,280	Low potential to occur. Suitable habitat for the species is present in the Study Area, but records for the species are from the southern and eastern San Gabriel Mountains.
Astragalus hornii var. *hornii*	Horn's milk-vetch	None/None/1B.1	Meadows and seeps, Playas; Alkaline, Lake Margins/annual herb/May–Oct/ 195–2,785	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/ perennial evergreen shrub/ (Feb)Mar–June/230–2,705	Not expected to occur. This conspicuous species was not observed in the Study Area.
Calochortus clavatus var. *clavatus*	club-haired mariposa lily	None/None/4.3	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Clay, Rocky, Serpentine (usually)/perennial bulbiferous herb/(Mar)May–June/100–4,265	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus clavatus var. *gracilis*	slender mariposa-lily	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland/perennial bulbiferous herb/Mar–June (Nov)/1,045–3,280	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus palmeri var. *palmeri*	Palmer's mariposa-lily	None/None/1B.2	Chaparral, Lower montane coniferous forest, Meadows and seeps; Mesic/ perennial bulbiferous herb/Apr–July/ 2,325–7,840	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Calochortus plummerae	Plummer's mariposa-lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland; Granitic, Rocky/perennial bulbiferous herb/May–July/330–5,580	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Calochortus striatus	alkali mariposa-lily	None/None/1B.2	Chaparral, Chenopod scrub, Meadows and seeps, Mojavean desert scrub; Alkaline, Mesic/perennial bulbiferous herb/Apr–June/230–5,230	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Calystegia peirsonii	Peirson's morning-glory	None/None/4.2	Chaparral, Chenopod scrub, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland/perennial rhizomatous herb/Apr–June/ 100–4,920	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Canbya candida	white pygmy-poppy	None/None/4.2	Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland; Granitic, Gravelly, Sandy/ annual herb/Mar–June/1,970–4,790	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Castilleja gleasoni	Mt. Gleason paintbrush	None/SR/1B.2	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; Granitic/perennial herb (hemiparasitic)/ May–June (Sep)/3,805–7,115	Not expected to occur. Suitable habitat for the species is present in the Study Area but the Study Area is outside the range of the species.
Castilleja plagiotoma	Mojave paintbrush	None/None/4.3	Great Basin scrub (alluvial), Joshua tree "woodland", Lower montane coniferous forest, Pinyon and juniper woodland/ perennial herb (hemiparasitic)/ Apr–June/985–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1B.1	Marshes and swamps, Valley and foothill grassland, Vernal pools/annual herb/May–Nov/0–1,570	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	None/SE/1B.1	Coastal scrub, Valley and foothill grassland/annual herb/Apr–July/ 490–4,000	Not expected to occur. Marginal habitat is present in the Study Area; however, no recent records along the SR-14.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Chorizanthe spinosa	Mojave spineflower	None/None/4.2	Chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, Playas; Alkaline (sometimes)/annual herb/Mar–July/20–4,265	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Claytonia peirsonii ssp. *peirsonii*	Peirson's spring beauty	None/None/1B.2	Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Metamorphic, Scree, Talus/perennial herb/(Mar) May–June/4,955–9,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Clinopodium mimuloides	monkey-flower savory	None/None/4.2	Chaparral, North Coast coniferous forest; Mesic, Streambanks/perennial herb/June–Oct/1,000–5,905	Not expected to occur. Suitable micro-habitats (mesic and streambanks) for the species are not present in the Study Area.
Diplacus johnstonii	Johnston's monkeyflower	None/None/4.3	Lower montane coniferous forest (disturbed areas, gravelly, roadsides, rocky, scree)/annual herb/May–Aug/ 3,200–9,580	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub; Flood deposited terraces and washes/annual herb/Apr–June/ 655–2,490	Not expected to occur. Suitable micro-habitats (Flood deposited terraces and washes) for the species are not present in the Study Area.
Erigeron breweri var. *jacinteus*	San Jacinto Mountains daisy	None/None/4.3	Subalpine coniferous forest, Upper montane coniferous forest; Rocky/ perennial rhizomatous herb/June–Sep/ 8,860–9,515	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Eriogonum umbellatum var. *minus*	alpine sulfur-flowered buckwheat	None/None/4.3	Subalpine coniferous forest, Upper montane coniferous forest; Gravelly/ perennial herb/June–Sep/ 5,905–10,065	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Erythranthe diffusa	Palomar monkeyflower	None/None/4.3	Chaparral, Lower montane coniferous forest; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–June/ 4,005–6,005	Not expected to occur. The Study Area is below the elevation range of the species.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Frasera neglecta	pine green-gentian	None/None/4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest/perennial herb/May–July/4,595–8,205	Not expected to occur. The Study Area is below the elevation range of the species.
Galium angustifolium ssp. *gabrielense*	San Antonio Canyon bedstraw	None/None/4.3	Chaparral, Lower montane coniferous forest; Granitic, Rocky (sometimes), Sandy (sometimes)/perennial herb/ Apr–Aug/3,935–8,695	Not expected to occur. The Study Area is below the elevation range of the species.
Galium angustifolium ssp. *gracillimum*	slender bedstraw	None/None/4.2	Joshua tree "woodland", Sonoran desert scrub; Granitic, Rocky/perennial herb/ Apr–June (July)/425–5,085	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Galium jepsonii	Jepson's bedstraw	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Granitic, Gravelly (sometimes), Rocky (sometimes)/perennial rhizomatous herb/July–Aug/5,055–8,205	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Galium johnstonii	Johnston's bedstraw	None/None/4.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Riparian woodland/perennial herb/ June–July/4,005–7,545	Not expected to occur. The Study Area is below the elevation range of the species.
Goodmania luteola	golden goodmania	None/None/4.2	Meadows and seeps, Mojavean desert scrub, Playas, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/annual herb/Apr–Aug/ 65–7,220	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Heuchera abramsii	Abrams' alumroot	None/None/4.3	Upper montane coniferous forest (rocky)/perennial rhizomatous herb/ July–Aug/9,185–11,485	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Heuchera caespitosa	urn-flowered alumroot	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Riparian forest (montane), Upper montane coniferous forest; Rocky/perennial rhizomatous herb/May–Aug/3,790–8,695	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Horkelia cuneata var. *puberula*	mesa horkelia	None/None/1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/ perennial herb/Feb–July (Sep)/ 230–2,660	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Hulsea vestita ssp. *gabrielensis*	San Gabriel Mountains sunflower	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Rocky/perennial herb/May–July/ 4,920–8,205	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Hulsea vestita ssp. *parryi*	Parry's sunflower	None/None/4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; Carbonate (sometimes), Granitic (sometimes), Openings, Rocky/perennial herb/ Apr–Aug/4,495–9,500	Not expected to occur. The Study Area is below the elevation range of the species.
Imperata brevifolia	California satintail	None/None/2B.1	Chaparral, Coastal scrub, Meadows and seeps, Mojavean desert scrub, Riparian scrub; Mesic/perennial rhizomatous herb/Sep–May/0–3,985	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Juglans californica	Southern California black walnut	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous tree/Mar–Aug/ 165–2,955	Not expected to occur. This conspicuous species was not observed in the Study Area.
Juncus duranii	Duran's rush	None/None/4.3	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest; Mesic/perennial rhizomatous herb/July–Aug/ 5,800–9,200	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lepechinia fragrans	fragrant pitcher sage	None/None/4.2	Chaparral/perennial shrub/Mar–Oct/ 65–4,300	Not expected to occur. This conspicuous species was not observed in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3	Chaparral, Coastal scrub/annual herb/ Jan–July/5–2,905	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Leptosiphon aureus	Golden linanthus	None/None/4.2	Chaparral, Cismontane woodland, Valley and foothill grassland/annual herb/Apr—May/5-2,300	Present. Numerous observations of the species were mapped within the gen-tie portion of the Study Area
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland; Openings/perennial bulbiferous herb/ Mar–July (Aug)/100–5,905	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Lilium parryi	lemon lily	None/None/1B.2	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; Mesic/perennial bulbiferous herb/ July–Aug/4,000–9,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Linanthus concinnus	San Gabriel linanthus	None/None/1B.2	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest; Openings, Rocky/annual herb/ Apr–July/4,985–9,185	Not expected to occur. The Study Area is below the elevation range of the species.
Loeflingia squarrosa var. *artemisiarum*	sagebrush loeflingia	None/None/2B.2	Desert dunes, Great Basin scrub, Sonoran desert scrub; Sandy/annual herb/Apr–May/2,295–5,295	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lupinus albifrons var. *johnstonii*	interior bush lupine	None/None/4.3	Chaparral, Lower montane coniferous forest; Decomposed granitic/perennial shrub/May–July/4,920–8,205	Not expected to occur. The Study Area is below the elevation range of the species.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Lupinus elatus	silky lupine	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest/ perennial herb/June–Aug/ 4,920–9,845	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Lupinus peirsonii	Peirson's lupine	None/None/1B.3	Joshua tree "woodland", Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; Gravelly, Rocky/ perennial herb/Apr–June/3,280–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Lycium torreyi	Torrey's box-thorn	None/None/4.2	Mojavean desert scrub, Sonoran desert scrub; Rocky, Sandy, Streambanks, Washes/perennial shrub/(Jan–Feb)Mar–June (Sep–Nov)/-165–4,005	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Malacothamnus davidsonii	Davidson's bush-mallow	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous shrub/June–Jan/ 605–3,740	Not expected to occur. This conspicuous species was not observed in the Study Area.
Monardella australis ssp. *gabrielensis*	San Gabriel Mountains monardella	None/None/1B.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest; Granitic, Openings/shrub/July–Sep/ 5,245–7,215	Not expected to occur. The Study Area is below the elevation range of the species.
Monardella australis ssp. *gabrielensis*	San Gabriel Mountains monardella	None/None/1B.2	Broadleafed upland forest, Chaparral (montane), Lower montane coniferous forest; Granitic, Openings/shrub/July–Sep/5,250–7,220	Not expected to occur. The Study Area is below the elevation range of the species.
Monardella exilis	Mojave monardella	None/None/4.2	Chenopod scrub, Desert dunes, Great Basin scrub, Joshua tree "woodland", Lower montane coniferous forest, Mojavean desert scrub, Pinyon and juniper woodland; Sandy/annual herb/ Apr–Sep/1,970–6,725	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Monardella viridis	green monardella	None/None/4.3	Broadleafed upland forest, Chaparral, Cismontane woodland/perennial rhizomatous herb/June–Sep/ 330–3,315	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Mucronea californica	California spineflower	None/None/4.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland; Sandy/annual herb/Mar–July (Aug)/0–4,595	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Muhlenbergia californica	California muhly	None/None/4.3	Chaparral, Coastal scrub, Lower montane coniferous forest, Meadows and seeps; Mesic, Seeps, Streambanks/perennial rhizomatous herb/June–Sep/330–6,560	Not expected to occur. Suitable micro-habitats (mesic, seeps, and streambanks) for the species are not present in the Study Area.
Muilla coronata	crowned muilla	None/None/4.2	Chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland/perennial bulbiferous herb/Mar–Apr (May)/ 2,200–6,430	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/ 100–2,150	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Nemacladus secundiflorus var. *robbinsii*	Robbins' nemacladus	None/None/1B.2	Chaparral, Valley and foothill grassland; Openings/annual herb/Apr–June/ 1,150–5,580	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Opuntia basilaris var. *brachyclada*	short-joint beavertail	None/None/1B.2	Chaparral, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland/perennial stem/ Apr–June (Aug)/1,390–5,905	Present. Four individuals were identified in the gen-tie portion of the Study Area during the 2023 focused rare plant surveys.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/ 50–2,165	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Oreonana vestita	woolly mountain-parsley	None/None/1B.3	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest; Gravelly (sometimes), Talus (sometimes)/ perennial herb/Mar–Sep/ 5,300–11,485	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Packera ionophylla	Tehachapi ragwort	None/None/4.3	Lower montane coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial herb/ June–July/4,920–8,860	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Perideridia pringlei	adobe yampah	None/None/4.3	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland; Clay (often), Serpentine/ perennial herb/Apr–June (July)/ 985–5,905	Not expected to occur. Suitable micro-habitats (clay and serpentine soils) for the species are not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Phacelia mohavensis	Mojave phacelia	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/ annual herb/Apr–Aug/4,595–8,205	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	Chaparral, cismontane woodland, Coastal scrub, Riparian woodland; gravelly benches, dry stream bottoms, Sandy/perennial herb/ (July) Aug–Nov (Dec)/0–6,885	Low potential to occur. The species was initially assessed as having moderate potential due to the presence of suitable in the Study Area; however, the species was not observed during focused rare plant surveys.
Quercus durata var. *gabrielensis*	San Gabriel oak	None/None/4.2	Chaparral, Cismontane woodland/ perennial evergreen shrub/Apr–May/ 1,475–3,280	Not expected to occur. This conspicuous species was not observed in the Study Area.
Quercus engelmannii	Engelmann oak	None/None/4.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland/perennial deciduous tree/ Mar–June/165–4,265	Not expected to occur. This conspicuous species was not observed in the Study Area.
Selaginella asprella	bluish spike-moss	None/None/4.3	Cismontane woodland, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial rhizomatous herb/July/5,250–8,860	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Senecio astephanus	San Gabriel ragwort	None/None/4.3	Chaparral, Coastal scrub; Rocky, Slopes/perennial herb/May–July/ 1,310–4,920	Not expected to occur. The Study Area is outside the range of the species.
Sidotheca caryophylloides	chickweed oxytheca	None/None/4.3	Lower montane coniferous forest (sandy)/annual herb/July–Sep (Oct)/3,655–8,530	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur[2]
Stylocline masonii	Mason's neststraw	None/None/1B.1	Chenopod scrub, Pinyon and juniper woodland; Sandy/annual herb/ Mar–May/330–3,935	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Symphyotrichum greatae	Greata's aster	None/None/1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland; Mesic/perennial rhizomatous herb/ June–Oct/985–6,590	Not expected to occur. Suitable micro-habitat (mesic conditions) for the species is not present in the Study Area.
Syntrichopappus lemmonii	Lemmon's syntrichopappus	None/None/4.3	Chaparral, Joshua tree "woodland", Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/ annual herb/Apr–May (June)/ 1,640–6,005	Low potential to occur. The species was initially assessed as having high potential due to the presence of suitable in the Study Area and recent local records (Calflora 2025); however, the species was not observed during focused rare plant surveys.
Thysanocarpus rigidus	rigid fringepod	None/None/1B.2	Pinyon and juniper woodland; Dry, Rocky, Slopes/annual herb/Feb–May/ 1,965–7,215	Not expected to occur. Herbarium records for the species are only from San Diego and Riverside counties.
Yucca brevifolia	western Joshua tree	None/SC/CBR	Great Basin grassland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland, Sonoran desert scrub, Valley and foothill grassland/perennial leaf succulent/Apr–May/1,310–6,560	Not expected to occur. This conspicuous species was not observed in the Study Area.

Status Legend
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
State
SC: State candidate for listing
SE: State listed as endangered
SR: State designated as rare
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California but more common elsewhere
4: Plants of limited distribution
CBR: Considered by Rejected for a CRPR
Threat Rank

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% of 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)

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Special-Status Wildlife

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/CSL	Open grassland and scrub communities supporting suitable floral resources	Moderate potential to occur. The species may nest and forage in the Study Area; however, 2024 focused surveys for the species conducted in the Study Area were negative for the species.
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	Not expected to occur (overwintering). Suitable habitat for the species is not present in the Study Area; however, the species may be transient through the area during migration.
Euphydryas editha quino	quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex)	Not expected to occur. The Study Area is outside the current range of the species.
Glyptostoma gabrielense	San Gabriel chestnut	None/None	Native to a narrow strip of the front range of the San Gabriel Mountains about 15 miles (24 km) long near Pasadena, California, where it inhabits riparian canyons and other areas with sufficient seasonal moisture	Not expected to occur. The Study Area is outside the current range of the species.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Helminthoglypta fontiphila	Soledad shoulderband	None/None	known only from Little Rock Creek Canyon on the north flank of the San Gabriel Mountains and from the Santa Clara River in Soledad Canyon	Not expected to occur. The Study Area is outside the current range of the species.
Helminthoglypta traskii pacoimensis	Pacoima shoulderband	None/None	Known only from Pacoima Canyon on the west slope of the San Gabriel Mountains	Not expected to occur. The Study Area is outside the current range of the species.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Fish				
Catostomus santaanae	Santa Ana sucker	FT/None	Small, shallow, cool, clear streams less than 7 meters (23 feet) in width and a few centimeters to more than a meter (1.5 inches to more than 3 feet) in depth; substrates are generally coarse gravel, rubble, and boulder	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	FE/FP, SE	Slow-moving and backwater areas	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rhinichthys gabrielino	Santa Ana speckled dace	None/SSC	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Amphibians				
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana boylii pop. 6	foothill yellow-legged frog - south coast DPS	FE/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Rana muscosa	mountain yellow-legged frog	FE/SE	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Taricha torosa (Monterey Co. south only)	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Reptiles				
Actinemys pallida	southwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Anniella pulchra/ Anniella stebbinsi/ Anniella spp.	northern California legless lizard/ southern California legless lizard/ California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Moderate potential to occur. Suitable habitat is present throughout the Study Area and there are recent records in the region; however, moist sandy or loose, loamy soils are limited in the Study Area to beneath the larger California junipers due to the expected higher moisture content of the soil.
Arizona elegans occidentalis	California glossy snake	None/SSC	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils	Low potential to occur. Suitable habitat is present throughout the Study Area.
Aspidoscelis tigris stejnegeri	Coastal whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	Low potential to occur. Suitable habitat is present throughout the Study Area; however, the Study Area is in the northern limits of the species.
Diadophis punctatus modestus	San Bernardino ring-necked snake	None/None	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed-conifer forest, and woodland	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Gopherus agassizii	Mojave desert tortoise	FT/ST	Arid and semi-arid habitats in Mojave and Sonoran Deserts, including sandy or gravelly locations along riverbanks, washes, sandy dunes, canyon bottoms, desert oases, rocky hillsides, creosote flats, and hillsides	Not expected to occur. Suitable habitat for the species is not present in the Study Area, which is also outside the range of the species.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Moderate potential to occur. Suitable habitat is present throughout the Study Area and there are recent nearby records.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	Not expected to occur (nesting). Suitable habitat for the species is not present in the Study Area.
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Moderate potential to occur. Suitable habitat is present throughout the Study Area.
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to nest in the Study Area. Low potential for wintering and as a transient during foraging and migration. There is a 1965 record for nesting by the species to the south of the Study Area in Aliso Canyon.
Artemisiospiza belli belli	Bell's sage sparrow	None/WL	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Moderate potential to occur. Suitable habitat is present throughout the Study Area.
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/CSL	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur in the Study Area. The Study Area is outside of the predicted habitat for the species (CDFW 2024b) and no diagnostic sign of the species was observed during the many surveys of the Study Area

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Buteo regalis (wintering)	ferruginous hawk	None/WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	Low potential to occur. Marginal wintering habitat is present in the Study Area but local wintering records of the species are from the Antelope Valley, north of the Study Area.
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur for nesting in the Study Area but may occur as a transient during migration.
Charadrius (*Anarhynchus*) *montanus* (wintering)	mountain plover	BCC/SSC	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Falco mexicanus (nesting)	prairie falcon	None/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Geococcyx californianus	greater roadrunner	None/None	Include areas dominated by creosote, mesquite, chaparral, and tamarisk, as well as grasslands, riparian woodlands and canyons; nest sites are 3 to 10 feet or more off the ground, on a horizontal branch or in the crotch of a sturdy bush, cactus, or small tree	Occurs. The species was observed in the Study Area during the surveys and nesting habitat is found in the California juniper woodland. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Gymnogyps californianus	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees *(Sequoiadendron giganteus*); forages in relatively open habitats where large animal carcasses can be detected	Not expected to occur for nesting. Suitable nesting habitat for the species is not present in the Study Area. The species could be a transient in the area for foraging.
Icterus parisorum	Scott's oriole (breeding)	None/None	Breeding in Los Angeles County is concentrated in a few tracts of extensive Joshua tree woodland in the eastern Antelope Valley and patches of pinyon-juniper woodland on the north flank of the San Gabriel Mountains	Low potential to occur. While the Study Area does have juniper woodland, breeding records of the species in the region are from the desert slope of the San Gabriel Mountains (eBird 2025). The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Lanius ludovicianus (nesting)	loggerhead shrike	BCC/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Present. An individual was observed in 2023, suitable habitat for the species is present in the Study Area, and there are recent local records.
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Pooecetes gramineus	vesper sparrow	None/None	Breeds in the northern United States and Canada and in the West in mountain meadows, grassy mesas, and sagebrush steppe up to 9,800 feet; winters in open grasslands and sparse shrublands in the valley and desert regions of Los Angeles County.	Low potential to occur. The species could occur during the winter season but it is not expected to nest. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Sturnella neglecta	western meadowlark	None/None	Commonly be found in agricultural land and other open habitats in the Antelope Valley	Low potential to occur. The Study Area lacks breeding habitat for the species but it could forage on site. The species is included in this table since it is considered a Los Angeles County sensitive bird species (Los Angeles Audubon 2009).
Toxostoma lecontei	LeConte's thrasher	BCC/SSC	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Low potential to occur for roosting and may forage over the Study Area. Suitable roosting habitat (trees) for the species is present in the Study Area.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None/None	Desert wash, desert scrub, desert succulent scrub, and pinyon–juniper woodland	Not expected to occur. In Los Angeles County, records of the species are from the eastern desert foothills of the San Gabriel Mountains.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/None	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Low potential to occur. Suitable habitat is present throughout the Study Area; however, the Study Area is in the northern limits of the species.
Ovis canadensis nelsoni	Nelson's bighorn sheep	None/FP	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Myotis thysanodes	fringed myotis	None/None	Drier woodlands (oak, pinyon–juniper, and ponderosa pine), desert scrub, mesic coniferous forest, grassland, and sage–grass steppe; sea level to 9,350 ft; roosts in buildings, mines, rocks, cliff faces, bridges, and large, decadent trees and snags	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Myotis volans	long-legged myotis	None/None	Primarily coniferous forests, but also seasonally in riparian and desert habitats; roosts in crevices in cliffs, caves, mines, buildings, exfoliating tree bark, and snags	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Myotis yumanensis	Yuma myotis	None/None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees	Not expected to occur for roosting but may forage over the Study Area. Suitable roosting habitat for the species is not present in the Study Area.
Neotamias speciosus speciosus	lodgepole chipmunk	None/None	Lodgepole pine forests	Not expected to occur. Suitable habitat for the species is not present in the Study Area.

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Ovis canadensis nelsoni	Nelson's bighorn sheep	None/FP	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans	Not expected to occur. Suitable habitat for the species is not present in the Study Area.
Perognathus inornatus	San Joaquin pocket mouse	None/None	Open grassland and scrub areas on fine-textured soils	Not expected to occur. In Los Angeles County, records of the species are from the foothills of the Liebre Mountains.
Puma concolor (Southern California/Central Coast Evolutionarily Significant Unit)	mountain lion	None/CSL	Require large areas of relatively undisturbed habitats with adequate connectivity; these often consist of pine forests, riparian and oak woodlands, streams, chaparral, and grasslands, though they are also known to occur in desert habitats	High potential to occur. The Study Area is part of large areas of relatively undisturbed habitats with adequate connectivity so it is expected that the species could use the Study Area as part of a home range. State Route 14 may reduce connectivity between the San Gabriel and Sierra Pelona mountains but not prohibit it. The species is not expected to have natal dens in the Study Area since females typically avoid establishing a den near human activity (Center for Biological Diversity and the Mountain Lion Foundation 2019)
Taxidea taxus	American badger	None/SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils; needs sufficient food, friable soils and open, uncultivated ground; preys on burrowing rodents and digs burrows	Low potential to occur. Suitable habitat is present in the Study Area but no individuals were observed and no diagnostic sign (i.e., burrows or digs with the species' conspicuous claw marks) were observed during the extensive surveys. There is one record within 20 miles of the Study Area from 1930 at Lake Los Angeles (CDFW 2025). There is one 2021 iNaturalist record approximately 8.6 miles to the west near Agua Dulce (iNaturalist 2025).

Scientific Name	Common Name	Status[1] (Federal/State)	Habitat	Potential to Occur
Xerospermophilus mohavensis	Mohave ground squirrel	None/ST	Desert scrub habitats including those dominated by creosote bush and burrobush, desert sink scrub, and desert saltbush scrub	Not expected to occur. Suitable habitat for the species is not present in the Study Area and it is outside the range of the species.

Status Legend
Federal
BCC: Bird of Conservation Concern (U.S. Fish and Wildlife Service)
FC: Candidate for federal listing as threatened or endangered
FE: Federally listed as endangered
FT: Federally listed as threatened
State
FP: California Fully Protected Species
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened
CSL: Candidate for State Listing
WL: CDFW Watch List Species

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Plant and Wildlife Compendia

The following compendia documents the plant and wildlife species that were observed during the surveys for the Project.

Plants

Gymnosperms and Gnetophytes

CUPRESSACEAE—CYPRESS FAMILY
Juniperus californica—California juniper

EPHEDRACEAE—EPHEDRA FAMILY
Ephedra californica—California joint fir
Ephedra viridis—Mormon tea

Eudicots

ADOXACEAE—MUSKROOT FAMILY
Sambucus nigra ssp. *caerulea*—blue elderberry

APIACEAE—CARROT FAMILY
Lomatium mohavense—Mojave desertparsley

ASTERACEAE—SUNFLOWER FAMILY
Ambrosia acanthicarpa—flatspine bur ragweed
Ambrosia salsola var. *salsola*—burrobrush
Artemisia ludoviciana—white sagebrush
Artemisia tridentata ssp. *parishii*—big sagebrush
Artemisia tridentata ssp. *tridentata*—basin big sagebrush
Artemisia tridentata—big sagebrush
Chaenactis artemisiifolia—white pincushion
Chaenactis fremontii—pincushion flower
Chaenactis glabriuscula—yellow pincushion
Corethrogyne filaginifolia—sand-aster
Encelia actoni—Acton's brittle brush
Encelia farinosa—brittle bush
Encelia frutescens—button brittlebush
Ericameria brachylepis—chaparral goldenbush
Ericameria linearifolia—narrowleaf goldenbush
Ericameria nauseosa var. *hololeuca*—rubber rabbitbrush
Ericameria pinifolia—pinebush

Eriophyllum confertiflorum var. *confertiflorum*—golden-yarrow
Eriophyllum pringlei—Pringle's woolly sunflower
Gutierrezia californica—California match weed
Lasthenia glaberrima—smooth goldfields
Lasthenia gracilis—needle goldfields
Layia glandulosa—whitedaisy tidytips
Layia platyglossa—coastal tidytips
Malacothrix glabrata—smooth desertdandelion
Matricaria discoidea—disc mayweed
Senecio flaccidus—threadleaf ragwort
Stephanomeria pauciflora—brownplume wirelettuce
Tetradymia stenolepis—Mojave cottonthorn
Uropappus lindleyi—Lindley's silverpuffs

BORAGINACEAE—BORAGE FAMILY
Amsinckia douglasiana—Douglas' fiddleneck
Amsinckia menziesii—Menzies' fiddleneck
Cryptantha angustifolia—Panamint cryptantha
Cryptantha intermedia—Clearwater cryptantha
Harpagonella palmeri—Palmer's grapplinghook
Nemophila menziesii—baby blue eyes
Phacelia crenulata var. *ambigua*—purplestem phacelia
Phacelia distans—distant phacelia
Phacelia fremontii—Fremont's phacelia
Phacelia tanacetifolia—lacy phacelia
Pholistoma membranaceum—white fiestaflower

BRASSICACEAE—MUSTARD FAMILY
* *Hirschfeldia incana*—shortpod mustard
* *Sisymbrium altissimum*—tall tumblemustard

CACTACEAE—CACTUS FAMILY
Cylindropuntia echinocarpa—Wiggins' cholla
Opuntia basilaris var. *basilaris*—beavertail pricklypear
Opuntia basilaris var. *brachyclada*—short-joint beavertail
Opuntia littoralis—coast prickly pear

CHENOPODIACEAE—GOOSEFOOT FAMILY
Atriplex argentea—silverscale saltbush
Atriplex canescens—fourwing saltbush
Chenopodium californicum—California goosefoot
Grayia spinosa—spiny hop sage

CUCURBITACEAE—GOURD FAMILY

Marah macrocarpa—Cucamonga manroot

EUPHORBIACEAE—SPURGE FAMILY

Euphorbia albomarginata—whitemargin sandmat

FABACEAE—LEGUME FAMILY

Acmispon glaber—deer weed

Acmispon maritimus var. *maritimus*—coastal bird's-foot trefoil

Acmispon parviflorus—desert deervetch

Lupinus bicolor—miniature lupine

GERANIACEAE—GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill

LAMIACEAE—MINT FAMILY

Salvia apiana—white sage

Salvia carduacea—thistle sage

Salvia *columbariae*—chia

Salvia dorrii var. *pilosa*—purple sage

Scutellaria mexicana—Mexican bladdersage

LOASACEAE—LOASA FAMILY

Mentzelia ravenii—no common name

MONTIACEAE—MONTIA FAMILY

Calyptridium monandrum—common pussypaws

NYCTAGINACEAE—FOUR O'CLOCK FAMILY

Mirabilis laevis var. *crassifolia*—California four o'clock

ONAGRACEAE—EVENING PRIMROSE FAMILY

Camissonia contorta—plains evening primrose

Eulobus californicus—California suncup

* *Oenothera biennis*—common evening primrose

OROBANCHACEAE—BROOM-RAPE FAMILY

Castilleja exserta ssp. *exserta*—exserted Indian paintbrush

PAPAVERACEAE—POPPY FAMILY

Eschscholzia californica—California poppy

Eschscholzia minutiflora—pygmy poppy

Platystemon californicus—creamcups

PLANTAGINACEAE—PLANTAIN FAMILY

Penstemon spectabilis—showy penstemon

POLEMONIACEAE—PHLOX FAMILY

Eriastrum densifolium—giant woollystar

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum fasciculatum—California buckwheat

Rumex hymenosepalus—canaigre dock

RANUNCULACEAE—BUTTERCUP FAMILY

Delphinium parishii—desert larkspur

SOLANACEAE—NIGHTSHADE FAMILY

Lycium cooperi—peach thorn

Monocots

AGAVACEAE—AGAVE FAMILY

* *Agave americana*—American century plant

Hesperoyucca whipplei—chaparral yucca

POACEAE—GRASS FAMILY

* *Avena fatua*—wild oat

Bromus carinatus—California brome

* *Bromus diandrus*—ripgut brome
* *Bromus hordeaceus*—soft brome
* *Bromus madritensis* ssp. *rubens*—red brome
* *Bromus tectorum*—cheatgrass

Elymus elymoides—squirreltail

Festuca microstachys—small fescue

Hordeum jubatum—foxtail barley

* *Hordeum murinum*—mouse barley

Melica imperfecta—smallflower melicgrass

Poa secunda—onesided bluegrass

* *Schismus arabicus*—Arabian schismus

Stipa speciosa—desert needlegrass

THEMIDACEAE—BRODIAEA FAMILY

Dichelostemma capitatum ssp. *capitatum*—bluedicks

Wildlife

Invertebrate

NYMPHALIDAE—BRUSH-FOOTED BUTTERFLIES

Junonia coenia—common buckeye

PIERIDAE—WHITES AND SULFURS BUTTERFLIES

Pieris rapae—cabbage white

Reptile

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis longipes—western fence lizard

Uta stansburiana elegans—western side-blotched lizard

TEIIDAE—WHIPTAIL LIZARDS

Aspidoscelis tigris tigris—Great Basin whiptail

Bird

ICTERIDAE—BLACKBIRDS

Icterus bullockii—Bullock's oriole

Icterus cucullatus—hooded oriole

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus—bushtit

FALCONIDAE—CARACARAS AND FALCONS

Falco sparverius—American kestrel

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus—house finch

Spinus lawrencei—Lawrence's goldfinch

Spinus psaltria—lesser goldfinch

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis saya—Say's phoebe

Tyrannus verticalis—western kingbird

Tyrannus vociferans—Cassin's kingbird

ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis—red-tailed hawk

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

Calypte costae—Costa's hummingbird

CORVIDAE—CROWS AND JAYS

Aphelocoma californica—California scrub-jay

Corvus corax—common raven

ALAUDIDAE—LARKS

Eremophila alpestris—horned lark

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—northern mockingbird

Toxostoma redivivum—California thrasher

ODONTOPHORIDAE—NEW WORLD QUAIL

Callipepla californica—California quail

PASSERIDAE—OLD WORLD SPARROWS

* *Passer domesticus*—house sparrow

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

* *Streptopelia decaocto*—Eurasian collared-dove

CUCULIDAE—CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus—greater roadrunner

LANIIDAE—SHRIKES

Lanius ludovicianus—loggerhead shrike

HIRUNDINIDAE—SWALLOWS

Stelgidopteryx serripennis—northern rough-winged swallow

TURDIDAE—THRUSHES

Sialia currucoides—mountain bluebird

Sialia mexicana—western bluebird

REMIZIDAE—PENDULINE TITS AND VERDINS

Auriparus flaviceps—verdin

PARULIDAE—WOOD-WARBLERS

Setophaga coronata—yellow-rumped warbler

TROGLODYTIDAE—WRENS

Campylorhynchus brunneicapillus—cactus wren
Salpinctes obsoletus—rock wren
Thryomanes bewickii—Bewick's wren

PASSERELLIDAE—NEW WORLD SPARROWS

Artemisiospiza belli—Bell's sparrow
Chondestes grammacus—lark sparrow
Melozone crissalis—California towhee
Passerculus sandwichensis—savannah sparrow
Zonotrichia leucophrys—white-crowned sparrow

Mammal

CANIDAE—WOLVES AND FOXES

Canis latrans—coyote

LEPORIDAE—HARES AND RABBITS

Lepus californicus—black-tailed jackrabbit
Sylvilagus bachmani—brush rabbit

SCIURIDAE—SQUIRRELS

Ammospermophilus leucurus—white-tailed antelope squirrel
Spermophilus (*Otospermophilus*) *beecheyi*—California ground squirrel

* signifies introduced (non-native) species

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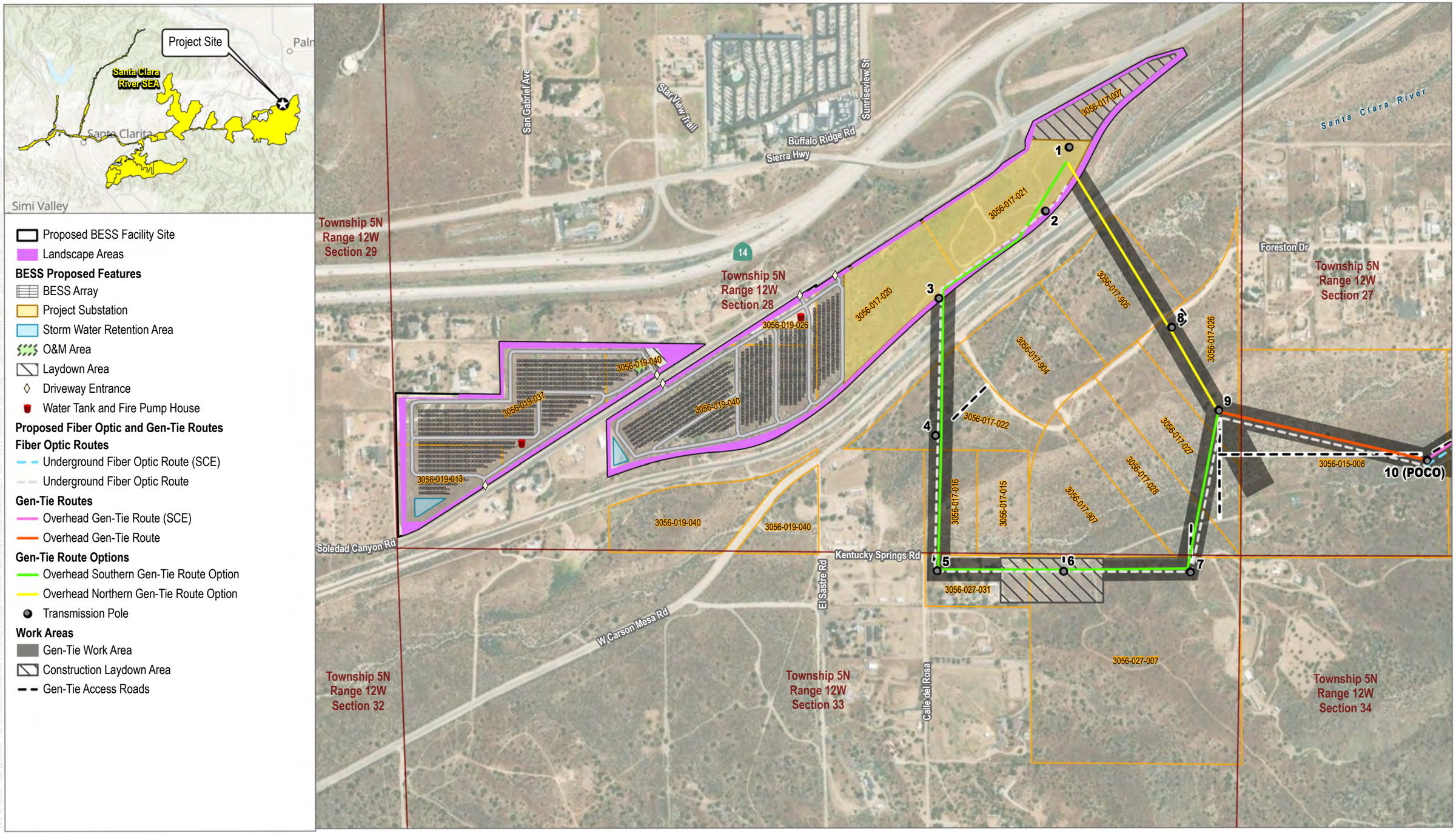
Appendix D
Conceptual Project Design



SOURCE: Maxar 2024; Los Angeles County 2025

DUDEK

0 300 600 Feet

FIGURE 2A

Conceptual Project Design - Project Components

Prairie Song Reliability Project