

SUNCREST DYNAMIC REACTIVE POWER SUPPORT PROJECT
Hermes Copper Butterfly Habitat Survey Report

Prepared for

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1 INTRODUCTION

1.1 Purpose of Biological Survey Report

SWCA Environmental Consultants (SWCA) has prepared this survey report for NextEra Energy Transmission West, LLC (NEET West) in support of Suncrest Reactive Power Support Project (Project) located in San Diego County, California. Information contained in this document is consistent with the requirements of the draft Mitigation Monitoring and Reporting Program (MMRP) of the Suncrest Dynamic Reactive Power Support Project Draft Environmental Impact Report (DEIR; California Public Utilities Commission 2016).

Hermes copper butterfly occurs in chaparral and coastal scrub. Larvae are dependent on spiny redberry, a plant species common in cismontane California coastal sage scrub and chaparral vegetation communities, which is present within the Project's 150-m survey buffer. The historical range of Hermes copper butterfly is limited to San Diego County, California, south to Santo Tomas, Baja California Norte, Mexico. Today, the butterfly is known to occur primarily in the southwest portion of San Diego County (NEET West 20015a). There is no formal USFWS survey protocol for Hermes copper butterfly, but the *County of San Diego Guidelines for Hermes Copper Butterfly (Lycaena hermes)* was used as a general guideline for the surveys (County of San Diego 2010). These guidelines state that "any woody (mature) spiny redberry shrub with California buckwheat within 15 feet" is considered potential Hermes copper butterfly habitat and should be surveyed. The guidelines also state that even if Hermes copper butterfly is not present in their suitable habitat, any suitable habitat will be considered potential habitat for the Hermes copper butterfly. (NEET West 2015a, 2015b).

SWCA biologists conducted focused Hermes copper butterfly (*Hermelycaena [Lycaena] hermes*) habitat surveys in August 2017 and April 2018 in compliance with California Public Utilities Commission (CPUC) Mitigation Measure (MM) BIO-8 of the draft MMRP: Survey for Potential Hermes copper butterfly Habitat. Pursuant to the MM BIO-8, prior to the start of vegetation clearing for the Project, a survey shall be conducted to determine the presence or absence of potentially suitable Hermes copper butterfly habitat within the Project footprint. Potentially suitable habitat is defined in the MM as mature (i.e. woody) spiny redberry shrubs (*Rhamnus crocea*) within 15 feet of California buckwheat (*Eriogonum fasciculatum*).

1.2 Project Location and Description

The Project involves two primary components: the Static Var Compensator (SVC) facility and the 230 kV single circuit underground transmission line (underground transmission line). The proposed SVC is an approximately 112,000-square-foot facility that would produce and consume reactive power and interconnect with the 230 kV bus of the existing San Diego Gas and Electric Company (SDG&E) Suncrest Substation through the proposed underground transmission line, which is approximately 1 mile long. The proposed transmission line will be installed underground within polyvinyl chloride (PVC) conduits in a concrete-encased duct bank system beneath an existing paved, private road known as Bell Bluff Truck Trail. At the western terminus of the underground transmission line, the conductors would surface at a riser pole structure where they would transition to a 300-foot long overhead transmission line span and terminate into the existing Suncrest Substation's 230 kV bus.

The Project would connect to the existing electric transmission network at the Suncrest Substation 230 kV bus, which SDG&E built as part of the Sunrise Powerlink Transmission Project (Sunrise Powerlink) in 2012. The Project is located in the south-central portion of San Diego County, approximately 33 miles east



Figure 1. General Vicinity Map

of the Pacific Ocean in an unincorporated area approximately four miles southwest of the community of Descanso, and approximately three miles southeast of the community of Alpine (Figure 1). The city of El Cajon is situated approximately 13 miles to the west. Interstate 8 (I-8) is located approximately two miles to the north, and Japatul Valley Road (State Highway 79) is located approximately two miles to the south. The Project is proposed to be located on privately owned land in proximity to the U.S. Forest Service (USFS) Cleveland National Forest (CNF).

2 METHODS

Pursuant to Mitigation Measure BIO-8 of the MMRP, “Prior to the start of vegetation clearing for the Project, a survey shall be conducted to determine the presence or absence of potentially suitable Hermes copper habitat within the Project footprint. Potentially suitable habitat is defined as mature (woody) spiny redberry shrub(s) within 15 feet of California buckwheat. If Hermes copper habitat is mapped within the project footprint and will be affected by Project activities, then Mitigation Measure BIO-9 shall be implemented.”

SWCA biologists and botanists with familiarity of local flora and fauna conducted focused Hermes copper butterfly habitat surveys within the Project footprint from August 15 to August 17, 2017, and from August 8 to 10, 2018. The objective of this study was to determine the presence or absence of suitable Hermes copper butterfly habitat within the proposed Project footprint.

The surveys were conducted by walking transects spaced approximately 10 meters apart within the Project footprint, and in areas with suitable conditions for spiny redberry shrubs, meandering transects were utilized in the undeveloped chaparral and woodland habitats due to vegetation and terrain that obstructed straight paths. SWCA biologists visually surveyed for any signs of the targeted plant species; transect spacing was variable based on visibility, with transects closer together in areas with poor visibility caused by heavy cover in the mid- and over-story.

Pursuant to measure BIO-8, all spiny redberry with California buckwheat within 15 feet (measured in the field) were marked as potential Hermes copper butterfly habitat with a Trimble Juno GPS unit. Pursuant to MM BIO-9, approximately 77.3 acres of the survey area were surveyed with meandering transects spaced approximately 10 meters apart to detect potential mitigation opportunities should MM BIO-9 be implemented in the future. MM BIO-9 states the following, “NEET West or their contractor(s) shall implement the following measures: If areas mapped as Hermes Copper butterfly habitat are adversely affected by the Proposed Project, NEET West shall mitigate permanent impacts at a 1:1 ratio for unoccupied habitat and 3:1 ratio for occupied habitat. Habitat should be considered occupied if it is within 150 meters of a Hermes copper sighting (County of San Diego 2010).”

The Project footprint was surveyed with 100 percent coverage by transects. Within the survey area, approximately 86.6 acres of largely inaccessible and undeveloped land within the survey area (any areas within 150 meters of the Project footprint) were surveyed using binoculars or a combination of transects and binoculars to detect California buckwheat shrubs within the dense chamise (*Adenostoma fasciculatum*) scrub. The California buckwheat flowers were highly visible at the time of the survey, the absence of which indicates a lack of potential habitat for Hermes copper butterfly. Areas with detectable California buckwheat were investigated on foot whenever possible, but emergent California buckwheat was uncommon in the dense chamise scrub, likely due to the dense chamise canopy cover. Approximately 5.2 acres of the remaining undeveloped areas were not surveyed due to limited accessibility. All areas that were not surveyed are greater than 50 meters from the project footprint, and it is anticipated that this gap in survey coverage will have no effect regarding potential impacts to, or mitigation for, Hermes copper habitat.

3 RESULTS

No potential Hermes copper butterfly habitat was detected within the Project footprint during the 2017 and 2018 surveys. The closest suitable habitat for Hermes copper butterfly was recorded approximately four feet west of the Project footprint and approximately 100 feet south by southeast of the SDG&E-operated access gate. No Hermes copper butterfly were observed in their suitable habitat during the surveys.

During the August 2017 focused Hermes copper butterfly surveys and suitable habitat assessment, 273 data points of potential Hermes copper butterfly habitat (one or more spiny redberry shrubs with California buckwheat located within 15 feet) were recorded within the survey area (Figures 2 through 7). The majority of the potential Hermes copper butterfly habitat (144 data points) were observed north of Bell Bluff Truck Trail in the northeastern portion of the survey area within the *Quercus engelmannii* Woodland Alliance and the *Q. berberidifolia*-*Adenostoma fasciculatum* Shrubland Alliance (as documented in the vegetation community maps in the DEIR). The biologists noted the presence of potential Hermes copper butterfly habitat within the survey area was almost always paired with the presence of oak trees (*Q. berberidifolia*, *Q. engelmannii*, and/or *Q. agrifolia*).

Additional biological surveys were conducted August 8–10, 2018. Methodologies outlined above in Section 2.0 were repeated and yielded no new results of potential Hermes copper butterfly habitat within the Project footprint. Observations of potential Hermes copper butterfly habitat previously recorded within the search area during the 2017 surveys remained the same; as such, no new data points were recorded.

4 DISCUSSION AND RECOMMENDATIONS

Hermes copper butterfly was identified in relevant CPUC CEQA documents as having a moderate potential to occur at the Project area. Although the designation may reflect the potential of the species to occur in within the 150-m survey area, no suitable Hermes copper butterfly habitat (i.e., spiny redberry with California buckwheat plants within 15 feet) was observed in the impact area. Therefore, per the Project's MMRP, no additional measures are required.

As previously described, the Project involves two primary components: SVC facility and the underground transmission line. The SVC site will be located south of Bell Bluff Truck Trail in a restored vegetated area (Appendix A - Photo 1). A portion of this area was known as the Wilson Construction Yard and was cleared and graded for its use as a construction staging/laydown area during construction of SDG&E's Suncrest Substation. The underground transmission line of the Project will exit the SVC on the north side and then turn westward along the north side of Bell Bluff Truck Trail for approximately one mile to a point where the transmission line will transition to a riser pole structure. Bell Bluff Truck Trail was paved and widened as part of the Sunrise Powerlink project, including raising the elevation of the road surface (Appendix A-Photo 2). Due to the temporary and permanent impacts resulting from the construction of the Sunrise Powerlink, spiny redberry with California buckwheat within 15 feet was absent from the Project footprint.

Per the draft MMRP, implementation of measure BIO-9 is not required at this time, because Hermes copper butterfly habitat was not mapped within the Project footprint. However, if Hermes copper butterfly habitat is identified within the project footprint in the future and will be affected by Project activities, then MM BIO-9 shall be implemented.

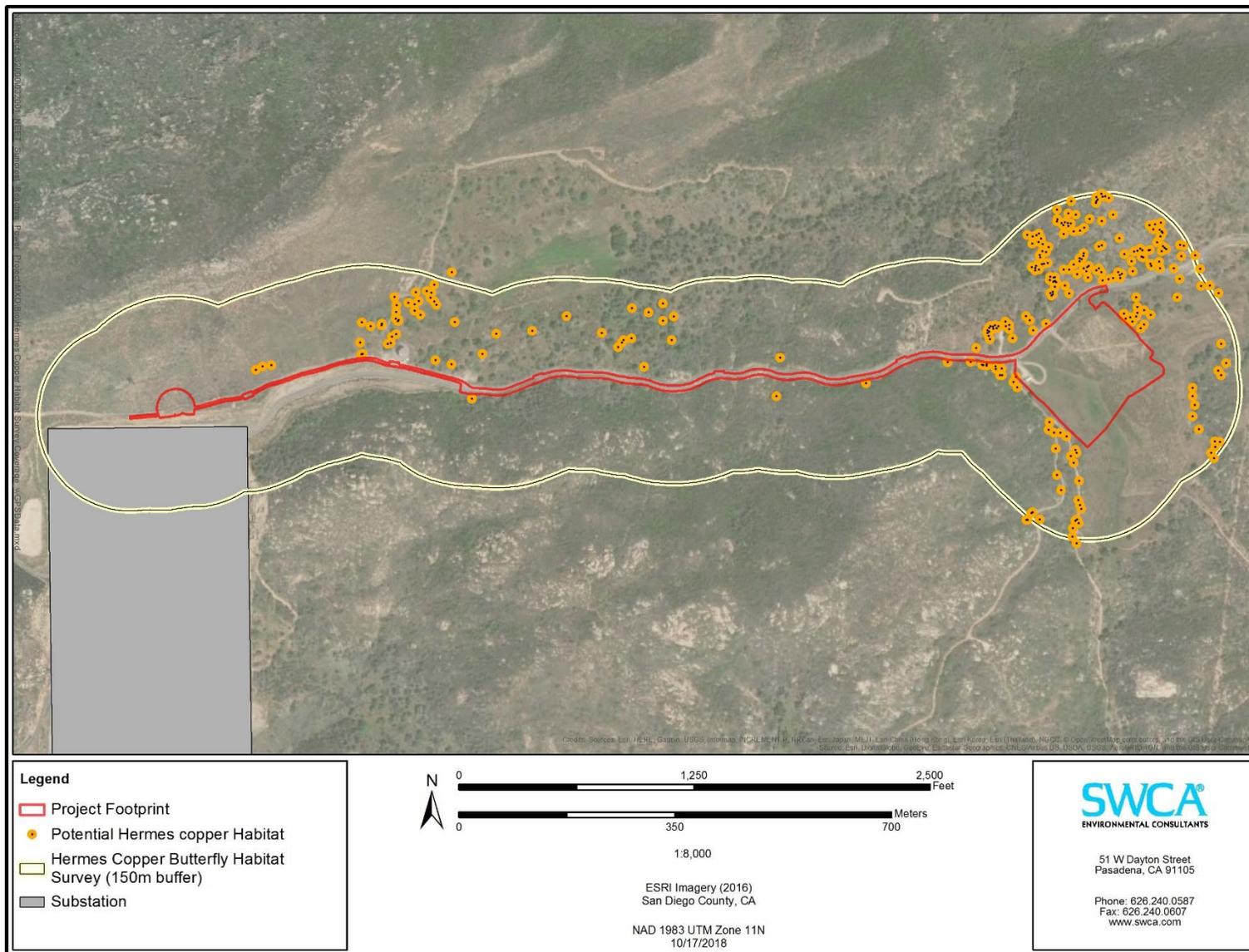


Figure 2. Potential Hermes Copper Butterfly Habitat Survey Results Overview

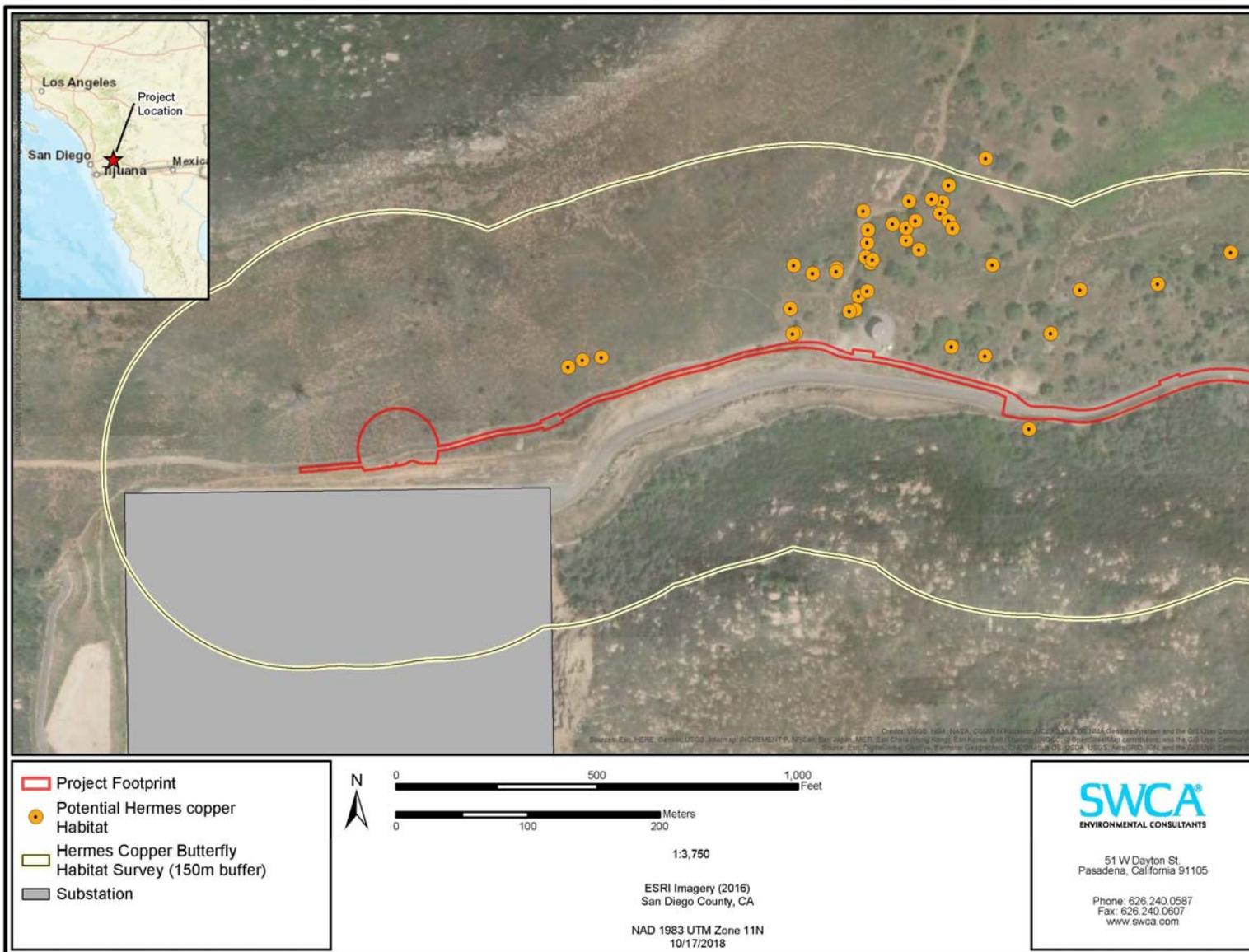


Figure 3. Potential Hermes Copper Butterfly Habitat Survey Results Focus Map 1 of 5

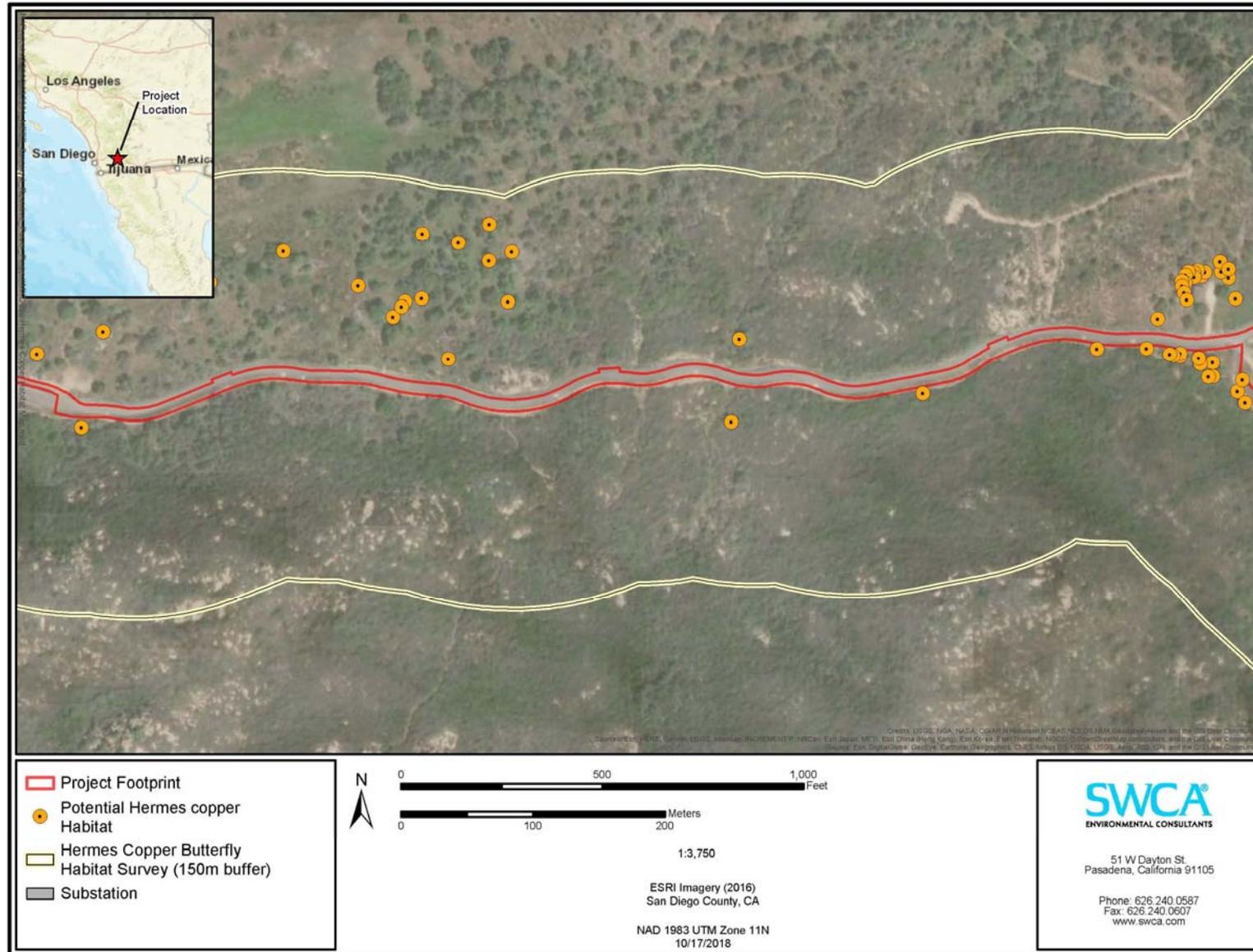


Figure 4. Potential Hermes Copper Butterfly Habitat Survey Results Focus Map 2 of 5

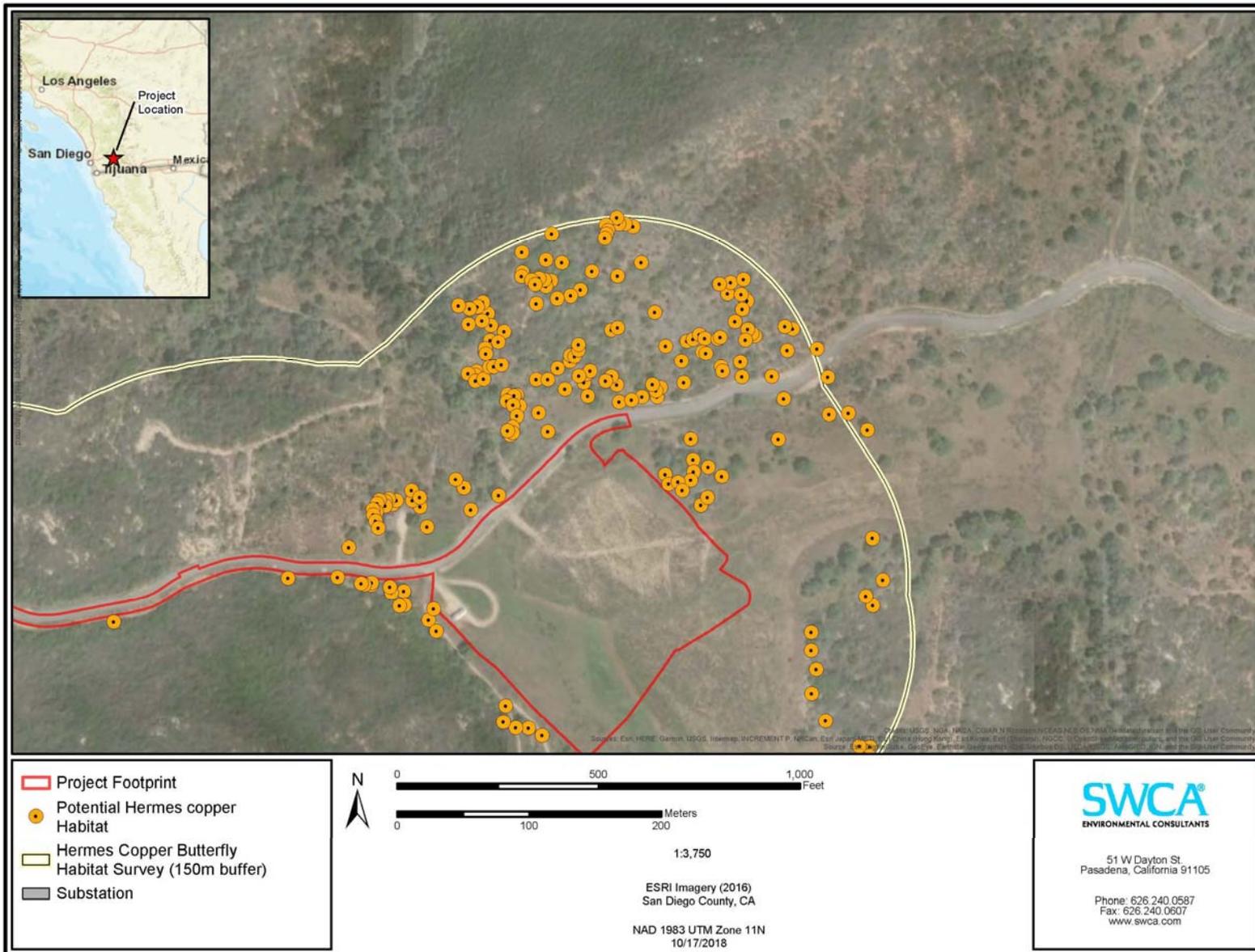


Figure 5. Potential Hermes Copper Butterfly Habitat Survey Results Focus Map 3 of 5

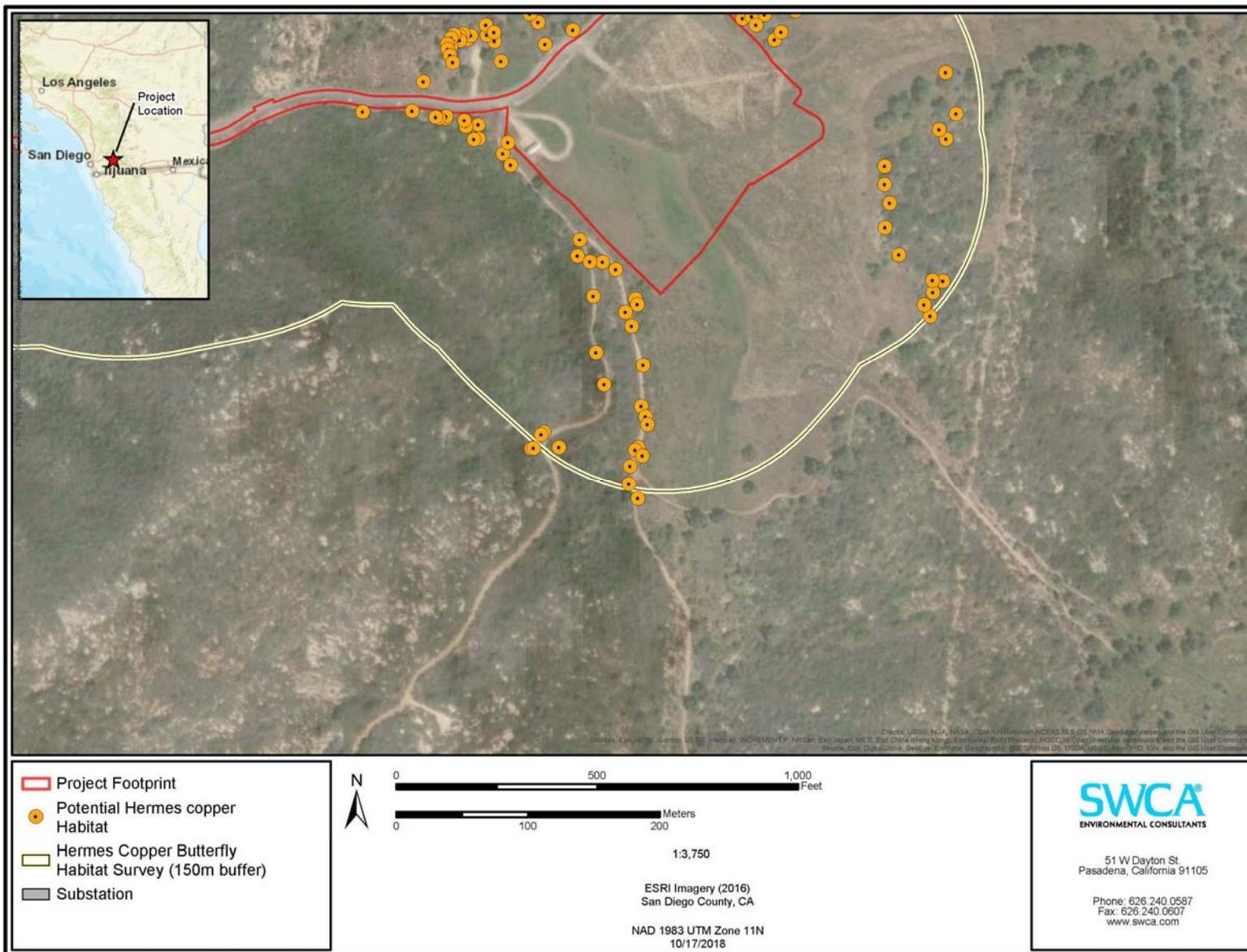


Figure 6. Potential Hermes Copper Butterfly Habitat Survey Results Focus Map 4 of 5

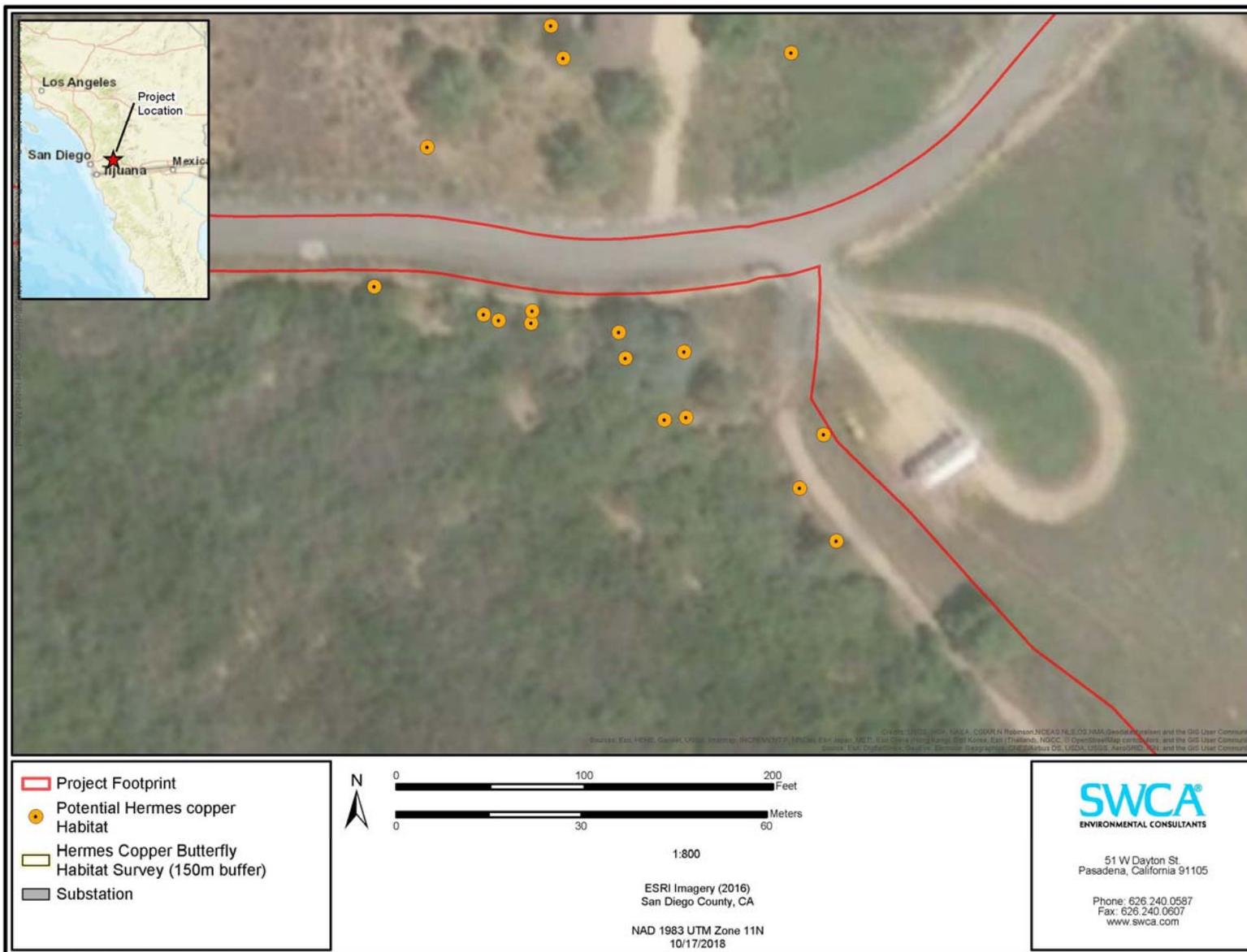


Figure 7. Potential Hermes Copper Butterfly Habitat Survey Results Focus Map 5 of 5

5 LITERATURE CITED

California Public Utilities Commission. 2016 *Suncrest Dynamic Reactive Power Support Project Draft Environmental Impact Report*.

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APPENDIX A.
Photo Documentation



Photo 1. View facing east-northeast of the Project area. SVC restored site seen in the upper right of the photo (red arrow) and Bell Bluff Truck Trail alongside (green arrow). Photo taken on August 10, 2018.



Photo 2. View of facing southwest towards Bell Bluff Truck Trail restored area. Photo shows representative conditions of the impact area (red dash) near the chaparral communities at the Project area. Photo taken on August 17, 2017.