

Appendix 8R. 2008 Survey Results Summary

TRC Companies, Inc., contracted by SDG&E, conducted focused surveys in the spring of 2008 for the Quino checkerspot butterfly (QCB), Hermes copper butterfly, and special status plant species for the Proposed Project and all of the alternatives addressed in the Draft EIR/EIS except the non-wires alternatives and LEAPS. HELIX Environmental Planning, Inc. (HELIX; consultant to CPUC) conducted a QCB habitat assessment and USFWS protocol survey for the QCB and a special status plant species survey for Talega to Escondido (an element of LEAPS) in spring 2008.

Insignia Environmental, contracted by SDG&E, conducted a records search, general biological survey, and special status plant species survey for the Jacumba/ECO Substation (an element of the Rumorosa Wind Energy Project) in spring 2008. The records search for the substation included a review of aerial photographs, USGS topographic maps, National Wetland Inventory maps, San Diego County Bird Atlas, USFWS Recovery Plans for Peninsular bighorn sheep and QCB, Flat-tailed Horned Lizard Interagency Coordinating Committee's Flat-tailed Horned Lizard Rangelwide Management Strategy, and database searches that are managed by the CNPS and CNDDDB. Rocks Biological Consulting, contracted by SDG&E, conducted a QCB habitat assessment and USFWS protocol survey for the QCB at the Jacumba/ECO Substation in spring 2008.

The surveys were conducted because spring 2008 was a better rainfall year than 2007 (i.e., better data could be gathered), and the survey results would be useful data for the U.S. Fish and Wildlife Service (USFWS) in issuing its Biological Opinion on the project. In the case of the surveys for Talega to Escondido, none had ever been conducted in this area before. These survey results are being presented herein to provide complete disclosure of all special status species data that were collected by the date of publication of the Final EIR/EIS. These surveys were not done as part of the EIR/EIS, and the TRC Companies, Inc. Insignia Environmental, and Rocks Biological Consulting surveys were not overseen (nor were their results verified) by the BLM, CPUC, and their consultants. Also, it should be noted that additional surveys may be required prior to construction which could yield different results. Therefore, the results of these surveys do not change the Class I (i.e., significant and not mitigable to less than significant levels) conclusions made in the Draft EIR/EIS for the QCB (Impact B-7J), Hermes copper butterfly (covered under Impact B-7), and special status plant species (Impact B-5).

Additionally, HELIX completed vegetation mapping for the reroutes analyzed in the RDEIR/SDEIS through interpretation of aerial photographs because the majority of the reroutes differ only by several hundred feet from the portions of the Proposed Project, alternatives, or options that they would replace. Existing vegetation mapping, which was collected for the Draft EIR/EIS, and generalized MSCP vegetation mapping of San Diego County were used as references during interpretation of aerial photographs. Vegetation mapping was verified by field surveys only along the Coastal Link System Upgrades Alternative Revision because it would traverse areas of coastal San Diego County that were not assessed as part of the Draft EIR/EIS. A literature review was conducted and included a review of information obtained from the USFWS, CDFG, California Department of Parks and Recreation, BLM, and USDA Forest Service. Databases managed by the CNPS and CNDDDB were also reviewed. Information from the Wildlife Research Institute regarding golden eagle nest locations and information from Phil Unitt of the San Diego Natural History Museum regarding bird migration routes was also reviewed. No focused surveys were conducted for the reroutes, but presence of special status species was assumed where potential habitat for them was present.

This appendix provides a summary of the survey methods and results. The details of the TRC Companies, Inc., survey methods, including where surveys were and were not conducted for the butterflies, were provided in unpublished draft reports to the USFWS (QCB) and SDG&E (Hermes copper butterfly) dated August 2008. The results of the TRC Companies, Inc., special status plant species survey were provided in the form of Excel tables and GIS shapefiles by SDG&E. The details of the Insignia Environmental surveys were provided in an Initial Biological Resources Report prepared for SDG&E dated June 2008. The details of the Rocks Biological Consulting QCB survey were included as an appendix (i.e., a draft survey report to the USFWS dated June 11, 2008) to the Insignia Environmental Report. The details of the HELIX survey methods for Talega to Escondido, including where surveys were and were not conducted for the QCB, were provided in a survey report to the USFWS dated June 6, 2008. The results of the HELIX special status plant species survey are from an unpublished draft report. Please refer to Appendix 8 of the Draft EIR/EIS for the milepost (MP) locations used in this appendix for the Proposed Project and alternatives, and refer to Figure E.7.1-1 of the Draft EIR/EIS for the MP locations for Talega to Escondido.

QUINO CHECKERSPOT BUTTERFLY

The USFWS Year 2005 Recommended QCB Survey Areas map, the most recent information available, was used to determine appropriate locations to conduct QCB surveys along the Proposed Project route and alternative routes. Portions of the Proposed Project route and alternative routes were excluded from survey if they fell outside of the USFWS Recommended QCB Survey Areas. In addition, some portions of the Proposed Project route or alternative routes (and their associated access roads, staging areas, etc.) were either not surveyed or excluded due to restricted access to some privately owned properties or because the route fell within developed areas where construction would not impact potential QCB habitat. The focused QCB survey began March 7, 2008 and ended May 13, 2008. QCB were only found in two distinct locations along the Modified Route D (MRD) Alternative. A total of 14 individual adult QCB were observed along the MRD Alternative during four separate site visits between March 27 and April 11, 2008. The QCB sightings were in the vicinity of Barrett Lake near MP MRD-18 and MP MRD-21.5.

HELIX conducted a QCB survey and habitat assessment for Talega to Escondido that occurs outside of Marine Corps Base Camp Pendleton where access to the ROW was obtainable without permission. HELIX also conducted a QCB habitat assessment for the portion of the ROW that occurs on Camp Pendleton but not a USFWS protocol survey because access to the Base was granted too late in the survey season. No QCB were found.

Rocks Biological Consulting conducted a QCB habitat assessment of the Jacumba/ECO Substation in March 2008 followed by a USFWS protocol survey for the QCB in April 2008. No QCB were found.

HERMES COPPER BUTTERFLY

Based on historical occurrences and in relation to the Proposed Project route and alternative routes, the survey area for the Hermes Copper butterfly stretched from the far western end of the project (i.e., Penasquitos Substation) to just east of SR79. There is no historical data to support that Hermes copper would occur any farther east. Surveys for the Hermes copper were conducted along portions of the Proposed Project route and alternative routes that fell within the known range for the species. Some portions of the Proposed Project route or alternative routes (and their associated access roads, staging

areas, etc.) could not be surveyed due to restricted access to some privately owned properties. Additionally, some areas were excluded where the routes fell within developed areas where construction would not impact potential Hermes copper habitat. The focused survey began May 25, 2008 and ended July 9, 2008.

Approximately 55 Hermes copper butterflies were observed along the Interstate 8 (I-8) Alternative between June 7, 2008 and July 9, 2008. The sightings were generally grouped in four clusters found within a 4.5-mile stretch, between MP I8-64 and MP I8-69. This area also included the I-8 Alternative Substation. The first cluster was observed within the I-8 Alternative Substation site and associated access roads. The second, and largest, cluster was approximately 2.0 miles west of the first cluster, where large numbers of Hermes copper were found along the access roads just south of the route. Northeast of this large cluster was another cluster found along existing access roads. The fourth cluster was along access roads in the vicinity of MP I8-68.8.

Approximately 80 Hermes copper butterflies were observed between May 29, 2008 and June 29, 2008 along the MRD Alternative. The sightings were generally in three separate clusters within the central area of this alternative. Thirteen of the butterflies were found in the Round Potrero area, along access roads near MP MRD-20.7. The largest concentration of Hermes copper in this area was in an approximately 3.6-mile stretch between MP MRD-27.4 to MP MRD-31.0, where they were found all along the route as well as along some of the access roads. A third, smaller cluster was found just north of the large cluster along the route and access roads near MP MRD-33.7.

SPECIAL STATUS PLANT SPECIES

The description of the special status plant species results presented below is organized by route rather than by individual species, and the plant species are alphabetized by common name. Some portions of the Proposed Project route or alternative routes (and their associated access roads, staging areas, etc.) could not be surveyed due to restricted access to some privately owned properties. Additionally, some areas were excluded where the routes fell within developed areas. TRC Companies, Inc. found special status plant species along these routes: Proposed Project, Interstate 8 (I-8) Alternative, I-8 Alternative West Buckman Springs Option, I-8 Alternative South Buckman Springs Option, I-8 Alternative Buckman Springs Underground Option, BCD Alternative, BCD Alternative South Option, Route D Alternative, MRD Alternative, Overhead 500 kV ABDSP Within Existing ROW Alternative, Santa Ysabel Existing ROW Alternative, Santa Ysabel SR79 All Underground Alternative, Pomerado Road to Miramar Area North Alternative, and Top of the World Substation Alternative.

HELIX conducted a special status plant species survey for Talega to Escondido where access to the ROW was obtainable without permission. These surveys covered only what could be seen from the existing ROW.

Insignia Environmental conducted a special status plant species survey for the Jacumba/ECO Substation, and no special status plant species were found. Therefore, the Jacumba/ECO Substation is not listed below.

Proposed Project

Twelve special status plant species were found along the Proposed Project route as follows.

Borrego bedstraw (*Galium angustifolium* ssp. *borregoense*; State rare). Four Borrego bedstraw plants were found near MP 81.

California adolphia (*Adolphia californica*; CNPS List 2). Forty California adolphia plants were found near MP 142.

Coves' cassia (*Senna covesii*; CNPS List 2). Forty Coves' cassia plants were found between MP 80 and MP 81.

Delicate clarkia (*Clarkia delicata*; CNPS List 1B). One-hundred three delicate clarkia plants were found between MP 125 and MP 126.

Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*; CNPS List 1B). One-hundred sixty-two long-spined spineflower plants were found between MP 98 and MP 99.

Nuttall's scrub oak (*Quercus dumosa*; CNPS List 1B). Two Nuttall's scrub oak plants were found near MP 147.

San Diego barrel cactus (*Ferocactus viridescens*; CNPS List 2). Six San Diego barrel cacti were found near MP 146.5.

San Diego gumplant (*Grindelia hirsutula* var. *hallii*; CNPS List 1B). Three-thousand nine-hundred fifteen San Diego gumplant plants were found between MP 107 and MP 108.

San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*; CNPS List 1B). Two-hundred San Diego sand aster plants were found near MP 134.5, and 60 San Diego sand aster plants were found near MP 136.

San Diego sunflower (*Hulsea californica*; CNPS List 1B). Approximately 1,300 San Diego sunflower plants were found between MP 89 and MP 93.

Warner Springs lessingia (*Lessingia glandulifera* var. *tomentosa*; CNPS List 1B). Fifteen Warner Springs lessingia plants were found near MP 97; 1,525 were found between MP 98 and MP 99; and 1,294 were found between MP 99 and MP 100.

Willow monardella (*Monardella viminea*; Federally and State endangered). Two willow monardella plants were found near MP 134.

Seven other special status species were observed in 2007 (see Table D.2-3 of the Draft EIR/EIS): San Diego thorn-mint (*Acanthomintha ilicifolia*; Federally threatened, State endangered), Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*; Federally endangered), wart-stemmed ceanothus (*Ceanothus verrucosus*; CNPS List 2), summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*; CNPS List 1B), Del Mar sand aster (*Corethrogyne filaginifolia* var. *linifolia*; CNPS List 1B), pygmy lotus (*Lotus haydonii*; CNPS List 1B), and San Felipe monardella (*Monardella nana* ssp. *leptosiphon*; CNPS List 1B).

I-8 Alternative

Fourteen special status plant species were found along the I-8 Alternative route as follows. Three of these (delicate clarkia, Orcutt's brodiaea, and San Diego sunflower) were observed in 2007.

Hairy stickleaf (*Mentzelia hirtusissima*; CNPS List 2). One-hundred ninety hairy stickleaf plants were found between MP I8-17 and MP I8-19.

Delicate clarkia (*Clarkia delicata*; CNPS List 1B). Three-hundred fifty-five delicate clarkia plants were found near MP I8-54, and 55 delicate clarkia plants were found near MP I8-55.

Desert beauty (*Linanthus bellus*; CNPS List 2). One-thousand one-hundred thirty desert beauty plants were found between MP I8-43 and MP I8-44.

Desert spikemoss (*Selaginella eremophila*; CNPS List 2). One-hundred desert spikemoss plants were found near MP I8-25.5.

Jacumba milk-vetch (*Astragalus douglasii* var. *perstrictus*; BLM sensitive, Forest Service sensitive, CNPS List 1B). One Jacumba milk-vetch plant was found near MP I8-37; 1 was found at a staging area/fly yard near MP I8-39; 62 were found near MP I8-40; and 30 were found near MP I8-52.

Mexican hulsea (*Hulsea mexicana*; CNPS List 2). Three-hundred Mexican hulsea plants were found at the I-8 Substation Alternative.

Mountain Springs bush lupine (*Lupinus excubitus* var. *medius*; BLM sensitive, CNPS List 1B). One Mountain Springs bush lupine plant was found near MP I8-40.

Orcutt's brodiaea (*Brodiaea orcuttii*; State rare, BLM sensitive, Forest Service sensitive, CNPS List 1B). Two-hundred Orcutt's brodiaea plants were found at the I-8 Substation Alternative.

Payson's jewel-flower (*Caulanthus simulans*; Forest Service sensitive). Fifty Payson's jewel-flower plants were found near MP I8-39; 65 were found near MP I8-55; and 15 were found near MP I8-66.

San Diego goldenstar (*Muilla clevelandii*; BLM sensitive; CNPS List 1B). One-thousand one-hundred fifty San Diego goldenstar plants were found near MP I8-92.

San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*; CNPS List 1B). One San Diego sand aster plant was found near MP I8-91.

San Diego sunflower (*Hulsea californica*; CNPS List 1B). Thirty-one San Diego sunflower plants were found near MP I8-63.

Southern jewel-flower (*Streptanthus campestris*; Forest Service sensitive; CNPS List 1B). Seventeen southern jewel-flower plants were found near MP I8-39, and 1 southern jewel-flower plant was found near MP I8-43.

Sticky geraea (*Geraea viscida*; CNPS List 2). Nine sticky geraea plants were found near MP I8-39; 48 were found near MP I8-40; 10 were found near MP I8-53, and 3 were found near MP I8-54.

I-8 Alternative West Buckman Springs Option

Three special status plant species were found along the I-8 Alternative West Buckman Springs Option: delicate clarkia (260 plants), Jacumba milk-vetch (40 plants), and sticky geraea (47 plants). Sticky geraea was observed along this option in 2007.

I-8 Alternative South Buckman Springs Option

Two special status plant species were found along the I-8 Alternative South Buckman Springs Option: delicate clarkia (45 plants) and Jacumba milk-vetch (149 plants).

I-8 Alternative Buckman Springs Underground Option

One special status plant species was found along the I-8 Alternative Buckman Springs Underground Option: sticky geraea (160 plants). Sticky geraea was observed along this option in 2007.

BCD Alternative

Six special status plant species were found along the BCD Alternative as follows. Two of these (desert beauty and sticky geraea) were observed in 2007.

Desert beauty (*Linanthus bellus*; CNPS List 2). Two-hundred eighty-seven desert beauty plants were found between MP BCD-2 and MP BCD-2.5; 214 were found between MP BCD-3 and MP BCD-4; and 363 were found between MP BCD-5 and MP BCD-11.

Jacumba milk-vetch (*Astragalus douglasii* var. *perstrictus*; BLM sensitive, Forest Service sensitive, CNPS List 1B). Seventy-five Jacumba milk-vetch plants were found between MP BCD-0 and MP BCD-1; 11 were found near MP BCD-2; 41 were found between MP BCD-2 and MP BCD-2.5; 66 were found between MP BCD-3 and MP BCD-4; and 195 were found between MP BCD-5 and MP BCD-11.

Mountain Springs bush lupine (*Lupinus excubitus* var. *medius*; BLM sensitive, CNPS List 1B). One-hundred five Mountain Springs bush lupine plants were found near MP BCD-1.

Payson's jewel-flower (*Caulanthus simulans*; Forest Service sensitive). Two-thousand four-hundred seventy-one Payson's jewel-flower plants were found between MP BCD-3 and MP BCD-4; 1,172 were found between MP BCD-5 and MP BCD-11; and 25 were found near MP BCD-13.5.

Sticky geraea (*Geraea viscida*; CNPS List 2). One-hundred sixty-eight sticky geraea plants were found between MP BCD-0 and MP BCD-1; 137 were found between MP BCD-2 and MP BCD-2.5; 76 were found between MP BCD-3 and MP BCD-4; and 100 were found between MP BCD-5 and MP BCD-11.

Tecate tarplant (*Deinandra floribunda*; BLM sensitive, Forest Service sensitive, CNPS List 1B). Three-hundred fifty Tecate tarplant plants were found near MP BCD-6.5.

BCD Alternative South Option

Three special status plant species were found along the BCD Alternative South Option as follows.

Jacumba milk-vetch (*Astragalus douglasii* var. *perstrictus*; BLM sensitive, Forest Service sensitive, CNPS List 1B). Ten Jacumba milk-vetch plants were found near MP BCDS-5.

Payson's jewel-flower (*Caulanthus simulans*; Forest Service sensitive). Twenty-five Payson's jewel-flower plants were found near MP BCDS-0; 2,500 were found between MP BCDS-1 and MP BCDS-2; 1,180 were found between MP BCDS-2 and MP BCDS-3; and 50 were found near MP BCDS-5.

Sticky geraea (*Geraea viscida*; CNPS List 2). Fifty sticky geraea plants were found near MP BCDS-5.

Route D Alternative

Eight special status plant species were found along the Route D Alternative as follows. Three of these (felt-leaved monardella, Ramona horkelia, and San Diego thorn-mint) were observed in 2007.

Delicate clarkia (*Clarkia delicata*; CNPS List 1B). Two-thousand four-hundred forty-six delicate clarkia plants were found between MP D-5 and MP D-14.

Felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*; Forest Service sensitive, CNPS List 1B). Seven-hundred seventy-four felt-leaved monardella plants were found between MP D-1 and MP D-1.5.

Mountain Springs bush lupine (*Lupinus excubitus* var. *medius*; BLM sensitive, CNPS List 1B). Seven Mountain Springs bush lupine plants were found near MP D-8.5.

Orcutt's brodiaea (*Brodiaea orcuttii*; State rare, BLM sensitive, Forest Service sensitive, CNPS List 1B). Six Orcutt's brodiaea plants were found near MP D-4.

Ramona horkelia (*Horkelia truncata*; Forest Service sensitive, CNPS List 1B). One-hundred three Ramona horkelia plants were found near MP D-7.5.

San Diego goldenstar (*Muilla clevelandii*; BLM sensitive; CNPS List 1B). Two San Diego goldenstar plants were found near MP D-7.5.

San Diego milk-vetch (*Astragalus oocarpus*; BLM sensitive, Forest Service sensitive, CNPS List 1B). Eighteen San Diego milk-vetch plants were found near MP D-6.

San Diego thorn-mint (*Acanthomintha ilicifolia*; Federally threatened, State endangered). Two-hundred fifty San Diego thorn-mint plants were found near MP D-1.

MRD Alternative

Eleven special status plant species were found along the MRD Alternative as follows. One of these (sticky geraea) was observed in 2007.

Delicate clarkia (*Clarkia delicata*; CNPS List 1B). Fifty delicate clarkia plants were found near MP MRD-31.

Dunn's mariposa lily (*Calochortus dunnii*; State rare, Forest Service sensitive, CNPS List 1B). Thirty Dunn's mariposa lily plants were found near MP MRD-24.

Felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*; Forest Service sensitive, CNPS List 1B). A total of eight-hundred five felt-leaved monardella plants were found near MPs MRD-24 and MRD-28.

Gander's ragwort (*Packera ganderi*; State rare, Forest Service sensitive). One-hundred ninety Gander's ragwort plants were found near MP MRD-24.

Jacumba milk-vetch (*Astragalus douglasii* var. *perstrictus*; BLM sensitive, Forest Service sensitive, CNPS List 1B). A total of one-hundred ninety-two Jacumba milk-vetch plants were found near MP MRD-3 along proposed access roads and west of MRD-5 at a proposed staging area.

Moreno currant (*Ribes canthariforme*; Forest Service sensitive, CNPS List 1B). Two Moreno currant plants were found near MP MRD-28.

Nuttall's lotus (*Lotus nuttallianus*; CNPS List 1B). Five Nuttall's lotus plants were found near MP MRD-29.

Payson's jewel-flower (*Caulanthus simulans*; Forest Service sensitive). Seven-thousand three-hundred ninety Payson's jewel-flower plants were found near MP MRD-3.

Ramona horkelia (*Horkelia truncata*; Forest Service sensitive, CNPS List 1B). Thirty-five Ramona horkelia plants were found near MP MRD-28.

Sticky geraea (*Geraea viscida*; CNPS List 2). A total of one-hundred thirteen sticky geraea plants were found between MP MRD-6 and MP MRD-8, near MP MRD-27.5, and near MP MRD-31.

Tecate tarplant (*Deinandra floribunda*; BLM sensitive, Forest Service sensitive, CNPS List 1B). Three-thousand three-hundred fifty-two Tecate tarplant plants were found between MP MRD-11 and MP MRD-19.

Overhead 500 kV ABDSP Within Existing ROW Alternative

Two special status plant species were found along the Overhead 500 kV ABDSP Within Existing ROW Alternative: Covess' cassia (39 plants near MP ER-20) and Payson's jewel-flower (3 plants near MP ER-20.5). Two other special status species were found along this alternative in 2007 (Borrogo bedstraw [*Galium angustifolium* ssp. *borregoense*; State rare] and pygmy lotus [*Lotus haydonii*; CNPS List 1B]).

Santa Ysabel Existing ROW Alternative

One special status plant species, Orcutt's brodiaea (75 plants), was found along the Santa Ysabel Existing ROW Alternative near MP SYR-3.5. One other special status species (San Diego gumplant [*Grindelia hirsutula* var. *hallii*; CNPS List 1B]) was observed in 2007.

Santa Ysabel SR79 All Underground Alternative

Two special status plant species were found along the Santa Ysabel SR79 All Underground Alternative: Orcutt's brodiaea (5,315 plants near MP SYAU-3) and San Diego gumplant (2 plants near MP SYAU-3).

Pomerado Road to Miramar Area North Alternative

Two special status plant species were found along the Pomerado Road to Miramar Area North Alternative: San Diego barrel cactus (1 plant near MP PM-12.5) and San Diego sand aster (30 plants near MP PM-12). One other special status species (Nuttall's scrub oak) was observed in 2007.

Top of the World Substation Alternative

One special status plant species, San Diego sunflower (404 plants), was found along proposed transmission line routes and access roads associated with the Top of the World Substation Alternative. One other special status species (delicate clarkia) was observed in 2007.

Talega to Escondido (Element of LEAPS)

Three special status plant species were found along the Talega to Escondido route as follows.

Rainbow manzanita (*Arctostaphylos rainbowensis*; CNPS List 1B). A total of thirty-three Rainbow manzanita plants were observed between approximately MP 30 and 31, near MP32, and near MP 22.

Ramona horkelia (*Horkelia truncata*; Forest Service sensitive, CNPS List 1B). Twenty-five Ramona horkelia plants were observed near MP 13 on Marine Corps Base Camp Pendleton.

Parry's tetraococcus (*Tetraococcus dioicus*; CNPS List 1B). Seventy-four Parry's tetraococcus plants were observed between approximately MP 16 and MP 20.