# Telecommunication System Route Biological Review

Prepared for

**Southern California Edison**

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**BLM** ☒
**Non BLM** ☒

## Applies to the following Project Elements:

| Colorado River to Devers Transmission Line | Devers to Valley Transmission Line | Colorado River Substation | Devers Substation | Valley Substation | Construction Yards and Helicopter Landing Zones | Distribution and Telecom Lines |
|---|---|---|---|---|---|---|
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# Acronyms and Abbreviations

## Global

| | |
|---|---|
| APM | Applicant Proposed Measure |
| BLM | Bureau of Land Management |
| CAISO | California Independent System Operator |
| CEQA | California Environmental Quality Act |
| CPCN | Certificate of Public Convenience and Necessity |
| CPUC | California Public Utilities Commission |
| CSLC | California State Lands Commission |
| DPV1 | Devers-Palo Verde No. 1 Transmission Line |
| DPV2 | Devers-Palo Verde No. 2 Transmission Line Project |
| DSWTP | Desert Southwest Transmission Line Project |
| EIR/EIS | Environmental Impact Report/Environmental Impact Statement |
| kV | kilovolt |
| NEPA | National Environmental Policy Act |
| Project | Devers-Palo Verde No. 2 Transmission Line Project |
| ROW | right-of-way |
| SCE | Southern California Edison |
| SBNF | San Bernardino National Forest |
| USDA | United States Department of Agriculture |
| USFS | United States Forest Service |
| USFWS | United States Fish and Wildlife Service |

## Plan Specific

| | |
|---|---|
| ADSS | All-Dielectric Self-Supporting |
| BRC | Bio Resource Consultants |
| BSC | Blythe Service Center |
| CCH | Consortium of California Herbaria |

| | |
|---|---|
| CDFG | California Department of Fish and Game |
| CNDDB | California Natural Diversity Data Base |
| CNPS | California Native Plant Society |
| CRS | Colorado River Substation |
| GANDA | Garcia and Associates |
| GSEP | Genesis Solar Energy Project |
| I | Interstate |
| OPGW | Optical Ground Wire |
| USACE | United States Army Corps of Engineers |
| WEAP | Worker Environmental Awareness Program |

# Executive Summary

This biological review was conducted for the Telecommunication System Route (Telecom Route) proposed for Southern California Edison's (SCE) Devers-Palo Verde No. 2 Transmission Line Project (Project or DPV2). Potential impacts to biological resources were evaluated in the DPV2 Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS; CPUC, 2006). This biological review was conducted to evaluate refinements to the Project that have occurred since the Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Project was certified by the California Public Utilities Commission (CPUC) in 2007 and subsequently modified as a California-only project by the CPUC (contingent upon California Independent System Operators or CAISO approval) in 2009. Additionally, the evaluation was conducted in compliance with the mitigation measure and Applicant Proposed Measure (APM) requirements for construction of the Project as outlined in the DPV2 Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS; CPUC, 2006).

In accordance with the Project USFWS Biological Opinion (USFWS, 2010b), a Qualified Biologist will conduct pre-construction clearance surveys preceding initiation of ground disturbing activities and will be present throughout construction activities. Additionally, SCE will implement the applicable FEIR/FEIS mitigation measures and APMs for special-status plants and wildlife (MM B-5a, MM B-7b, MM B-7c, MM B-8a, MM B-9a, MM B-9b, MM B-9c, MM B-9d, MM B-9e, M, M B-9g, APM B-4, APM B-11, APM B-14, APM B-18, APM B-19, APM B-23, APM B-26, APM B-27, APM B-28, APM B-29, APM B-31, APM B-32, APM B-35).

The APMs and DPV2 Final EIR/EIS mitigation measures are outlined in Table 1.

TABLE 1
DPV2 Final EIR/EIS Biological Resources Mitigation Measures and Applicant Proposed Measures Applicable to the DPV2 Telecom Route
*Telecommunication System Route Biological Review*

| Mitigation Measure | Description | Mitigation Measure Applicable? | Suitable Habitat Present? | Sensitive Species Observed On Site? | Previous Studies | Comments |
|---|---|---|---|---|---|---|
| MM B-1a | Prepare and implement a Habitat Restoration/ Compensation Plan | X | – | – | – | Applies to vegetated areas disturbed by construction activities |
| MM B-1b | Coordinate tower placement with United States Fish and Wildlife Service/Bureau of Land Management (USFWS/BLM) | – | – | – | – | Applies to tower placement |
| MM B-2a | Conduct invasive and noxious weed inventory | X | – | – | X | Baseline inventories have been completed and standard weed control measures will be implemented per the guidelines established in the Project Weed Control Plan |
| MM B-2b | Implement control measures for invasive and noxious weeds | X | – | – | X | Baseline inventories have been completed and standard weed control measures will be implemented per the guidelines established in the Project Weed Control Plan |
| MM B-5a | Conduct preconstruction surveys and monitoring for breeding birds | X | – | – | – | Preconstruction nesting bird surveys during the appropriate time of year will be required due to potentially suitable nesting habitat for some avian species; if breeding birds with active nests are found, a biological monitor will establish a suitable buffer around the nest for ground-based construction activities |
| MM B-6a | Develop a transplanting plan | X | – | – | X | Species suitable or required for transplanting are described in the transplanting plan |
| MM B-7b | Conduct preconstruction tortoise surveys | X | X | – | – | Preconstruction tortoise surveys will be conducted at all sites with potential habitat |
| MM B-7c | Purchase mitigation lands for impacts to tortoise habitat | X | – | – | X | Mitigation will be determined at the rates assigned by the USFWS Biological Opinion |

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| Mitigation Measure | Description | Mitigation Measure Applicable? | Suitable Habitat Present? | Sensitive Species Observed On Site? | Previous Studies | Comments |
|---|---|---|---|---|---|---|
| MM B-7d | Purchase mitigation lands for impacts to fringe-toed lizard habitat | – | – | – | X | The Telecom Route is not within modeled or critical habitat for Coachella Valley fringe-toed lizard |
| MM B-7e | Conduct focused surveys for California gnatcatchers | – | – | – | X | Areas along the Telecom Route do not support suitable habitat for California gnatcatchers; therefore, focused surveys are not required. |
| MM B-7f | Conduct focused surveys for Stephens' kangaroo rat and San Bernardino kangaroo rat | – | – | – | X | Areas along the Telecom Route do not contain occupied or suitable habitat for Stephens' kangaroo rat and San Bernardino kangaroo rat. |
| MM B-8a | Conduct surveys for listed plant species | X | X | – | X | Focused surveys have been conducted along various portions of the Telecom Route. Additional surveys will be conducted during the appropriate floristic period for plants identified as having a moderate potential to occur. |
| MM B-9a | Conduct preconstruction surveys | X | | | – | Preconstruction surveys will be conducted to ensure impacts to sensitive plant and wildlife species are minimized to the maximum extent possible. |
| MM B-9b | Conduct biological monitoring | X | – | – | – | Biological monitoring will be conducted to ensure compliance with the Project conservation measures. |
| MM B-9c | Implement a Worker Environmental Awareness Program (WEAP) | X | – | – | – | WEAP training is required for all field personnel working on the Project. |
| MM B-9d | Conduct preconstruction reptile surveys | X | X | – | X | Applies to areas that may support sensitive reptiles; preconstruction surveys will be conducted. |
| MM B-9e | Conduct preconstruction surveys and owl relocation | X | X | – | X | Applies to areas with suitable burrowing owl habitat. If burrowing owls are found onsite and cannot be avoided, passive relocation will be conducted |

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| Mitigation Measure | Description | Mitigation Measure Applicable? | Suitable Habitat Present? | Sensitive Species Observed On Site? | Previous Studies | Comments |
|---|---|---|---|---|---|---|
| MM B-9f | Perform construction outside of breeding and lambing period | – | – | – | – | Applies to locations on BLM or Forest Service land where bighorn sheep breeding or lambing may occur |
| MM B-9g | Conduct preconstruction surveys and relocation for American badger | X | X | X | X | If badgers are found during construction clearance surveys and cannot be avoided, relocation will be conducted. |
| MM B-9h | Conduct preconstruction surveys for roosting bats | – | – | – | X | Applies to locations near rocky areas, caves, or old mines. No suitable areas for bat roosting is located along the Telecom Route. |
| MM B-9i | Schedule construction when the Coachella Valley round-tailed squirrel is dormant | – | – | – | X | No nesting colonies or suitable habitat have been observed. If preconstruction surveys identify occupied areas, construction activities would not be permitted between March 1 and July 31 in these areas. |
| MM B-13a | Demonstrate compliance with the Western Riverside County Multiple Species Habitat Conservation Plant (MSHCP) | – | – | – | – | Applies to locations within the Western Riverside County MSHCP boundaries. |
| MM B-13b | Implement the BMPs required by the Western Riverside County MSHCP | – | – | – | – | Applies to locations within the Western Riverside County MSHCP boundaries |
| MM B-15a | Use collision-reducing techniques in installation of transmission lines | – | – | – | – | Applies to transmission lines |
| MM B-16a | Prepare and implement a raven control plan | X | – | – | – | Applies to locations that support desert tortoise. Raven control methods are outlined in the Project USFWS biological opinion. |
| MM B-18a | No activities in Riparian Conservation Areas | – | – | – | – | Applies to locations within the San Bernardino National Forest |

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| Mitigation Measure | Description | Mitigation Measure Applicable? | Suitable Habitat Present? | Sensitive Species Observed On Site? | Previous Studies | Comments |
|---|---|---|---|---|---|---|
| APM B-1 | Avoid direct disturbance of highly sensitive features with spanning and careful local adjustment in tower footing placement | – | – | – | – | Applies to tower placement |
| APM B-2 | Avoid the introduction of noxious weeds and/or other invasive species through standard noxious weed measures | X | – | – | – | Standard weed control measures will be implemented as stated in the Project Weed Control Plan. |
| APM B-4 | Avoid sand compaction at all sites in the Coachella Valley | X | – | – | – | Vehicles will remain on established roads to the maximum extent feasible. |
| APM B-6 | Avoid vehicular travel in washes to protect triple-ribbed milkvetch | – | – | – | X | Triple-ribbed milkvetch was not observed during the focused surveys. Vehicles will remain on established roads to the maximum extent feasible. |
| APM B-7 | No activities whatsoever should occur in wetland areas | – | – | – | X | There are no wetlands within the Telecom Route. |
| APM B-8 | Provide additional detailed surveys and tower-specific adjustments as needed prior to construction for major sensitive feature sites which cannot be easily avoided by spanning | – | – | – | – | Applies to the tower siting |
| APM B-9 | Initiate transplant efforts for *Ferocactus* and *Coryphantha* as soon as probable losses can be determined | – | – | – | X | Applies to locations that support *Ferocactus* and *Coryphantha*. No *Ferocactus* or *Coryphantha* were observed during the surveys. |

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| Mitigation Measure | Description | Mitigation Measure Applicable? | Suitable Habitat Present? | Sensitive Species Observed On Site? | Previous Studies | Comments |
|---|---|---|---|---|---|---|
| APM B-11 | The Authorized Officer may require vegetation in certain areas to be cleared by hand tools. Scalping of top soil and removal of low growing vegetation will not be allowed unless authorized by the Authorized Officer. | X | – | – | – | A small portion of the northern Telecom Route traverses Creosote Bush Scrub-Big Galletta. The Telecom line would be installed on existing poles in this area. |
| APM B-12 | Where possible, towers or access roads will be located so as to avoid sensitive plants or plant communities. Where this is not feasible, affected individual plants will be transplanted. | – | – | – | – | Applies to towers and access roads |
| APM B-13 | Tower sites will be selected to allow maximum spacing of sensitive features. | – | – | – | – | Applies to towers |
| APM B-14 | Minimize the area needed for equipment operation and material storage and assembly | X | – | – | – | Materials would be stored at an approved material storage yard for the Project. |
| APM B-18 | To the maximum extent possible, transmission pylons and poles, equipment storage areas, and wire-pulling sites should be sited in a manner that avoids desert tortoise burrows. | X | X | – | X | Desert tortoise burrows will be avoided to the maximum extent possible. |

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| Mitigation Measure | Description | Mitigation Measure Applicable? | Suitable Habitat Present? | Sensitive Species Observed On Site? | Previous Studies | Comments |
|---|---|---|---|---|---|---|
| APM B-19 | Whenever possible, spur roads and access roads and other disturbed sites created during construction should be recontoured and restored. | X | – | – | – | Rehabilitating areas subject to ground disturbance will be conducted in accordance with the Project Habitat Restoration Plan. |
| APM B-20 | All transmission lines should be designed in a manner that would reduce the likelihood of nesting by common ravens | – | – | – | – | Applies to transmission lines |
| APM B-21 | No clearing of or other disturbance to riparian habitats. | – | – | – | X | This measure was originally for the West of Devers project alternative that is no longer under consideration. |
| APM B-22 | Avoid impacts to mesquite-dominated habitats to protect crissal thrasher. | – | – | – | X | There is no mesquite-dominated habitat along the Telecom Route. |
| APM B-23 | Minimize impacts to or removal of creosote bush to benefit LeConte's thrasher. | X | X | X | X | Impacts to creosote bush scrub will be minimized to the extent feasible. |
| APM B-24 | Avoid any alterations to the vegetation structure of Washington fan palm oases to benefit southern yellow bat | – | – | – | X | There are no Washington fan palm oases along the Telecom Route. |
| APM B-25 | Avoid any alterations of mesquite hummock habitat to benefit Coachella Valley round-tailed ground squirrel | – | – | – | X | There is no mesquite hummock habitat along the Telecom Route. |

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|---|---|---|---|---|---|---|
| APM B-26 | Wash communities along the entire route and sand dune communities in the Coachella Valley will be spanned to the extent possible. | X | – | – | X | The majority of the Telecom system will be installed on existing structures. The spacing of new poles will be maximized to span sand dune communities to the extent feasible. |
| APM B-27 | Prior to construction activities, the Holder shall have a qualified tortoise biologist present a class or briefing to construction workers. | X | X | – | X | WEAP training is required for all field personnel working on the Project. |
| APM B-28 | The Holder shall hire a qualified tortoise biologist to conduct daily inspections of roads and work areas within tortoise habitat during the tortoise season of activity. | X | X | – | X | The biological monitor will ensure compliance with all desert tortoise conservation measures per the requirements in the USFWS Biological Opinion. |
| APM B-29 | The Holder shall restrict the speed on all roads within tortoise habitat to a maximum of 25 miles per hour. | X | X | – | X | The biological monitor will ensure compliance with all desert tortoise conservation measures. Speeds will be posted per the requirements in the USFWS Biological Opinion. |
| APM B-30 | Within tortoise habitat in California, spur roads shall not be bladed except where necessary to allow access for construction vehicles. | – | – | – | – | Applies to tower construction |
| APM B-31 | Any desert tortoise observed on access roads or work areas will be moved immediately away from the roadway into safe areas. | X | X | – | X | Any desert tortoise found on the surface or in burrows that cannot be avoided during Project activities would be relocated out of harm's way by the Authorized Biologist. |

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|---|---|---|---|---|---|---|
| APM B-32 | In areas considered to comprise suitable tortoise habitat, or other areas where tortoise are observed, all access roads and tower construction sites will be surveyed by a Qualified Biologist to delineate burrows or individuals for protection. | X | X | – | X | Any desert tortoise found on the surface or in burrows that cannot be avoided during Project activities would be relocated out of harm's way by the Authorized Biologist. |
| APM B-33 | If possible, no new roads, tower sitings, or spur roads will be built in blow sand areas. However, if spur roads are required through wind-blown sand habitat, the road will be returned to natural conditions and effectively closed following construction. | – | – | – | – | Identified areas of disturbance will be rehabilitated according to the Habitat Restoration/Compensation Plan. |
| APM B-34 | Where the Project crosses through the Coachella Valley Preserve, the Holder will cooperate with the Preserve in closing existing access roads. | – | – | – | – | The Telecom Route is not located in the Coachella Valley Preserve. |
| APM B-35 | Avoid upland areas where desert tortoises might occur and/or have a biologist present during construction activities that involve earth moving in order to move any tortoises that would likely be impacted | X | X | – | X | The biological monitor will ensure compliance with all desert tortoise conservation measures per the requirements in the USFWS Biological Opinion. |

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| Mitigation Measure | Description | Mitigation Measure Applicable? | Suitable Habitat Present? | Sensitive Species Observed On Site? | Previous Studies | Comments |
|---|---|---|---|---|---|---|
| APM B-36 | Avoid construction activities that would tend to create wind barriers that might result in sand stabilization in order to minimize impacts to populations of the Coachella Valley fringe-toed lizard | – | – | – | X | The Telecom Route is outside of the range of Coachella Valley fringe-toed lizard. |
| APM B-37 | Mitigation for the coastal California gnatcatcher should include protocol-driven preconstruction surveys. | – | – | – | X | There is no suitable habitat for California gnatcatcher along the Telecom Route. |
| APM B-38 | For least Bell's vireo, suitable habitat would be completely avoided by relocating tower sites and/or associated access roads. | – | – | – | X | There is no suitable habitat for least Bell's vireo. This measure applied to the west of Devers alternative that is no longer under consideration. |
| APM B-39 | Stephen's kangaroo rat habitat would be avoided, where possible. | – | – | – | X | There is no suitable habitat for Stephen's kangaroo rat. The Telecom Route is outside of their known range. |

# 1.0 Introduction

This biological review was conducted for the Telecommunication System Route (Telecom Route) for Southern California Edison's (SCE) Devers-Palo Verde No. 2 Transmission Line Project (Project or DPV2). The review was conducted as part of the SCE mitigation measure (MM) and Applicant Proposed Measure (APM) requirements for construction of the Project as outlined in Attachment A of Final Decision 07-01-040, Granting a Certificate of Public Convenience and Necessity (CPUC, 2007).

Following approval of the California-only portion of the DPV2 project, more detailed engineering has occurred on various elements of the project. A Project Refinements document was prepared that describes the project elements that were approved by the CPUC in 2009. The Refinements document compares the information in the DPV2 Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) (CPUC, 2006) and the anticipated effects of the refinements (SCE, 2010). This biological review summarizes the potential impacts associated with the changes to the Telecom Route as identified in the Refinements Document.

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# 2.0 Project Overview

SCE's DPV2 will be constructed to provide electrical transmission infrastructure to deliver new conventional and renewable generation from the Blythe area to the California Independent System Operator (CAISO) grid. The Project will consist of a new 500 kilovolt (kV) electric transmission line, including fiber optic communication lines, upgrades to the Valley and Devers substations, and the new Colorado River Substation (CRS). The transmission line will extend approximately 153 miles from the proposed CRS, approximately 10 miles southwest of Blythe, California, through Devers Substation near Palm Springs, California, to Valley Substation in Menifee, California (See Figure 1: Project Location Map). Based on final design plans, the California Public Utilities Commission (CPUC) made a decision to allow inclusion of the Desert Southwest Transmission Line Project (DSWTP) Midpoint Substation site, which is the CRS in the DPV2 Project[1] (CPUC, 2009).

The CPUC and Bureau of Land Management (BLM) prepared a combined Final EIR/EIS (CPUC, 2006) evaluating potential impacts of the Project on the existing environment. Upon receipt of the Record of Decision, this review may be amended to reflect the information in the clearance and approval documents.

## 2.1 Project Location – Telecom Route

The proposed Telecom Route is located near the City of Blythe in Riverside County, California. This area is on the Palo Verde Mesa at the eastern end of the Chuckwalla Valley, between the McCoy Mountains to the north and Mule Mountains to the south. Elevations along the Telecom Route range from about 480 feet above sea level on the western edge to about 230 feet in the agricultural fields. The Palo Verde Mesa is generally flat and characterized by locally extensive expanses of sand dunes and low sandy hummocks. Most drainages and channels in the Project area are oriented north-south, and most are relatively small and shallow.

## 2.2 Project Description – Telecom Route

The DPV2 Final EIR/EIS (CPUC, 2006) described the proposed telecommunication facilities in Table B-5 and included two fiber optic systems from the Midpoint Substation (now called CRS). The Final EIR/EIS states that a new telecommunications facility would be installed at the Midpoint Substation (now CRS) to provide microwave and fiber optic communications needed for the protective relaying and special protection system (SPS). With the approval of the California-only portion of the Project, there is a need to provide a telecom link between the CRS and the existing Blythe Service Center (BSC).

[1] The Colorado River Substation location is analyzed as the Midpoint Substation site in the DSWTP Final EIR/EIS, published by the Imperial Irrigation District and BLM in October 2005; it is also included in the DPV2 Final EIR/EIS as part of the Desert Southwest Transmission Project Alternative.

The Telecom Route includes two fiber optic lines, approximately 29,755 feet of optical ground wire (OPGW) and approximately 71,633 feet of All-Dielectric Self-Supporting (ADSS) fiber optic cable. The telecommunication lines would extend from the CRS, one to the southeast (southeast telecom line) and the second to the north and east (northern telecom line) (See Figures 2A and 2B). These routes are preliminary and may change as field surveys occur and the design of the telecommunication system progresses.

The southeast telecom line from the CRS would connect with the BSC. The southeast telecom line would extend from the CRS for about 5.5 miles along the existing Devers-Palo Verde No. 1 Transmission Line (DPV1) towers to approximately Tower M123-T1, where it would transition to new and existing poles located along an existing east-west patrol road. It would then be routed to the bottom of the mesa and along existing streets (22nd Avenue to Lovekin Boulevard) in the Palo Verde Valley to the BSC (approximately 14 miles).

The OPGW would be installed using pulling/splicing sites along the DPV1 right-of-way (ROW). For the portion of the southeast telecom line east of the DPV1 ROW, approximately 100 wood poles would be installed from the DPV1 ROW (about 5 miles southeast of the substation site) until existing poles can be used. The detailed alignment of the southeast telecom line will be defined during the final engineering design.

The northern telecom line from the CRS would connect with the Buck Substation located to the northeast of the CRS. The fiber optic line would be installed on the same poles as the 33 kV line extension (distribution power line extension) that would be extended to the CRS (from the north). The telecom line would then be installed on existing poles (along an existing access road, Blythe Way, north across Interstate [I] 10 to Hobson Way) to the Buck Substation. Several locations would be installed in underground conduit along the existing roadways. This would not require new poles or additional ground disturbance to previously undisturbed areas.

On average, all existing and new overhead structures would be between 25 feet and 65 feet tall. Most pole sites would require minimal site preparation prior to pole installation. The majority of the proposed pole locations would be along the existing SCE ROW or public roads. Sites may require minor grading, leveling, or clearing to accommodate the new poles. Where new access roads would be necessary, pole sites would be cleared and graded at approximately the same time that access roads for the 33 kV line extension are constructed. During the installation process, crews will use the CRS and Blythe Construction Yards as staging and lay down areas.

New wood poles for the distribution light and power/telecom route would be installed in native soil, in holes bored approximately 18 to 24 inches in diameter and 5 to 7 feet deep. Wood poles are normally installed using a Digger Derrick truck. Once the poles have been set in place, bore spoils (material from holes drilled in the soil) would be used to backfill the hole. If the bore spoils are not suitable for backfill, imported clean fill material, such as clean fill dirt and/or pea gravel, would be used. Excess bore spoils would be distributed at each pole site.

The fiber optic cable will use a high density polyethylene smooth wall inner duct that provides protection for and identification of the cable. The fiber optic cable will be installed

in the new underground conduit structure consisting of 5" PVC schedule 40 and underground manhole structures.

Fiber optic pulling and splicing sites will be required during installation of the proposed Telecom Route. Fiber optic cable pulling sites typically occur every 6,000 -to -10,000 feet and are required at the end and beginning of each cable pull. "Fiber optic cable pulls "are the length of any given continuous cable installation process between two selected points along the overhead or underground structure line. Fiber optic cable pulls are selected, where possible, based on availability of pulling equipment and designated dead-end structures at the ends of each pull, geometry of the line as affected by points of inflection, terrain, and suitability of fiber optic cable stringing and splicing equipment setups. The dimensions of the area needed for stringing setups varies upon the terrain; however, a typical stringing setup is 40 – by - 60 feet. Where necessary, due to suitable space limitations, crews can work from within a substantially smaller area.

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# 3.0 Methods

Biological surveys were conducted along the Telecom Route by TRC in 2007, BioResource Consultants (BRC) in 2008, Dudek in 2009, and AECOM and Garcia and Associates (GANDA) in 2010, for various segments of the Telecom Route. The focus of this biological review is to summarize the biological resources located during these survey efforts along the Telecom Route and associated 200-foot buffer.

For all survey efforts, qualified biologists conducted pedestrian surveys to assess the habitat for potential special-status species, conduct focused surveys for special-status species (e.g., rare plants, burrowing owl [*Athene cunicularia*], desert tortoise [*Gopherus agassizii*]), map vegetation communities, and document potential jurisdictional waters. The area was methodically surveyed on foot; biological resources were inventoried, and potential biological constraints were identified. During these surveys, common plant and wildlife species were also noted.

Due to changes in the Telecom Route design, areas along the route were surveyed at different periods. Because of these changes, portions of the proposed Telecom Route were not surveyed during ideal special-status species survey periods.

## 3.1 Literature Review

Prior to conducting the field investigations, a review of the existing biological resources within the vicinity of the Telecom Route was conducted using the California Natural Diversity Data Base (CNDDB, 2010), the California Rare Plant Rank (RPR) inventory (CNPS, 2010), the Consortium of California Herbaria (CCH, 2010), and United States Fish and Wildlife Service (USFWS) occurrence data and critical habitat data (USFWS, 2006; 2009a–b; 2010). The purpose of the review was to determine if special-status plant and wildlife species were known to occur within the Telecom Route or in the nearby vicinity.

Special-status species lists were derived from queries of the RPR, CNDDB, and USFWS databases. The query for the Telecom Route included the following 10 quads: Ripley, Hopkins Well, Roosevelt Mine, McCoy Peak, McCoy Wash, Blythe, Blythe NE, Mule Wash, Palo Verde, and Thumb Peak. A Riverside County list of USFWS special-status species was obtained from the Carlsbad USFWS Office. The Riverside County USFWS list was then queried for species whose lead office is the Carlsbad FW Office or Arizona Ecological Services Field Office.

## 3.2 Habitat Assessment

Habitat assessments were conducted in 2008, 2009, and 2010, for various segments of the Telecom Route. Concurrent with pedestrian surveys for sensitive species, potential plant and wildlife use of the area was determined according to known habitat preferences of the species and knowledge of their relative distributions in the area. In 2010, GANDA biologists assessed the potential for special-status plant and wildlife species occurrence based on a scale of no, low, moderate, and high potential to occur (Table 2). No potential to occur

indicates that there is no suitable habitat for the species. Low potential to occur indicates that there is marginal suitable habitat present. Moderate potential to occur indicates that suitable habitat is present, and the species has documented ranges in the area. High potential to occur indicates that there is optimal habitat, and/or the species was found in the survey area. Potentials for occurrence were summarized from the three consultants to form a consensus for each species.

## 3.3 Special-status Plant and Wildlife Surveys

Special-status plant and wildlife surveys were conducted in 2007, 2008, 2009, and 2010. TRC performed special-status plant and wildlife reconnaissance surveys in March of 2007. Protocol level surveys for desert tortoise were not performed during this effort. The 2007 TRC effort did not include a published report; however, field observations were documented on field forms and entered into the Project Geographic System Information (GIS) data files.

The 2008 BRC field effort focused on protocol-level surveys for desert tortoise (*Gopherus agassizii*) and to determine presence/absence of Lane Mountain milk-vetch (*Astragalus jaegerianus*). The desert tortoise surveys were conducted using a design and layout consistent with the standardized 1992 USFWS survey protocols for this species (USFWS, 1992). Biologists also conducted habitat assessments and surveys for other plants and wildlife known or suspected of occurring in the region, vegetation community mapping, and locations of major drainages that crossed the project rights-of-way.

Dudek performed special-status plant and wildlife reconnaissance surveys in October 2009. This field effort focused on identifying all plant and wildlife species encountered by sight, calls, tracks, scat, or other indicative signs. Protocol-level surveys for desert tortoise were not performed during this effort (Dudek, 2009).

GANDA performed special-status plant and wildlife reconnaissance surveys in September 2010. The field effort focused on presence/absence surveys of Abram's spurge (*Chamaesyce abramsiana*), as well as identifying all plant and wildlife species encountered by sight, calls, tracks, scat, or other indicative signs. Protocol-level surveys for desert tortoise were not performed during this effort (GANDA, 2010).

As part of the Blythe Solar Power Project (BSPP), AECOM conducted comprehensive biological resource surveys for the proposed CRS and a one-mile buffer area during the spring of 2010. The 100 percent coverage area included the proposed 230kV expansion area, the 500kV area already permitted by the CPUC and additional poles for the gen-tie lines for the BSPP and Genesis Solar Energy Project (GSEP). This area was surveyed using 30-ft wide belt transects, providing 100 percent coverage, and included zone of influence transects measuring out one mile from this area. Fieldwork focused on delineation of jurisdictional waters, rare plant surveys, general biological surveys, protocol surveys for the desert tortoise and western burrowing owl, golden eagle (*Aquila chrysaetos*) surveys, avian point count surveys, and a general wildlife inventory.

## 3.4 Vegetation Mapping

Vegetation mapping was conducted along portions of the proposed Telecom Route in October 2009 (Dudek, 2009). A subsequent mapping effort by Dudek was conducted for the 500-foot tower buffers for the proposed DPV2 (Dudek, 2010a). AECOM conducted vegetation community mapping throughout the northern telecom line and a portion of the southeastern telecom line in Spring 2010. GANDA performed additional vegetation mapping in September 2010 along the southern portion of the route in response to engineering changes.

Vegetation was mapped to the alliance level of the *List of Terrestrial Natural Communities* (CDFG, 2003) and the *List of California Vegetation Alliances* (CDFG, 2009a). These vegetation classification system documents were supplemented with vegetation community classifications described in *A Manual of California Vegetation* (Sawyer et al., 2009), *Vegetation Mapping of Anza-Borrego Desert State Park and Environs* (CDFG, 1998), *Mojave Desert Ecosystem Program: Central Mojave Vegetation Database* (Thomas et al., 2004), and *Vegetation Survey and Classification for the Northern & Eastern Colorado Desert Coordinated Management Plan (NECO)* (Evens and Hartman, 2007). Vegetation communities followed the naming convention established by the *Vegetation Communities Mapping for the Devers-Palo Verde No. 2 Project* (Dudek, 2010a). The biologist mapped homogenous vegetation stands based on dominant, codominant, and associated species.

## 3.5 Jurisdictional Waters

This section was derived from information in the *Jurisdictional Determination Report for the Devers-Palo Verde No. 2 500 kV Transmission Line Project, Riverside County, California* (Dudek, 2010b).

Data regarding aquatic resources present within the Project area were obtained through a review of pertinent literature and field reconnaissance. Prior to conducting field investigations, potential and/or historic drainages and aquatic features were investigated based on a review of the following: USGS topographic maps (1:24,000 scale), aerial photographs, USGS National Hydrography Dataset (NHD), USFWS National Wetland Inventory (NWI), and the DPV2 Final EIR/EIS (CPUC, 2006).

During field investigations, data, observations, and mapping information were collected on jurisdictional assessment data sheets prepared specifically for this Project. In addition to mapping features on the 1 inch = 200 feet aerial photograph-based field maps inset on data sheets, information pertaining to the physical (i.e., flow regime, substrate, geomorphology, and ordinary high water mark [OHWM] indicators), chemical, and biological characteristics of potentially jurisdictional features were collected.

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# 4.0 Results

The following section contains a comprehensive summary of biological resources located within the proposed Telecom Route. The survey results were used to identify potential biological resources along the proposed Telecom Route.

## 4.1 Survey Results

The literature review identified 44 special-status species as having the potential to occur along the Telecom Route, including 24 plants, 13 birds, 4 mammals, and 3 reptiles. These species are listed in Table 2.

### 4.1.1 Plants

Focused surveys have been completed for several plant species along various portions on the route, including Lane Mountain milk-vetch (*Astragalus jaegerianus*), ribbed cryptantha (*Cryptantha costata*), winged cryptantha (*Cryptantha holoptera*), Harwood's woollystar (*Eriastrum sparsiflorum*) , Harwood's milk-vetch (*Astragalus insularis* var. *harwoodii*), and Abram's spurge. In sections where focused surveys were not conducted during the optimal floristic period, potential occurrence was determined by the habitat assessments performed by each consultant. The potential for each species to occur and the recommended surveys are listed in Table 2.

Lane Mountain milk-vetch was not found along the Telecom Route during late spring surveys in 2008. There was no suitable habitat for this species and no further surveys are recommended. Lane Mountain milk-vetch occurs in just a few locations mainly in the western Mojave Desert, and specifically on the Fort Irwin military reservation to the west of the proposed Project.

During the 2010 spring survey conducted by AECOM, ribbed cryptantha and Harwood's milk-vetch were found within the 200-ft buffer along the northern and southern telecom routes near CRS (figure 2A). Winged cryptantha and Harwood's woollystar were found within the CRS one mile buffer, but not with the Telecom Route that lies within the CRS survey area.

Abram's spurge was not found during fall surveys in 2010 along the southern Telecom Route. Surveys for Abram's spurge were not conducted for the northern Telecom Route due to the lack of suitable habitat in this area. Abram's spurge is known mainly from disturbed margins of water bodies, specifically by the Salton Sea.

#### 4.1.1.1.1 Desert Tortoise (*Gopherus agassizii*)

No live tortoises were encountered during the protocol surveys in 2008 or reconnaissance surveys of 2009 and 2010. However, three tortoise carcasses (bone fragments), seven scat, and three burrows were found by BRC during the 2008 surveys. The fragmented carcasses were found on the western section of the northern telecom line, near CRS (Figure 3A). The scat and the burrows were found on the upland mesa section of the southern telecom line. Similarly, no live tortoises were encountered during the comprehensive biological resource

surveys conducted by AECOM during the spring of 2010. However, three tortoise carcasses (bone fragments), and two tortoise burrows were found during the spring 2010 surveys. The three scat and two burrows were found within the one-mile buffer area of the proposed CRS (Figure 3A and 3B). Two live desert tortoises were identified in historical data for the proposed Telecom Route: one adult male and one occupied burrow (Figure 3A and 3B). The adult male tortoise was found resting in the shade of existing DPV1 tower located at M125-T2 during the spring 2007 biological reconnaissance survey conducted by TRC. The burrow occupied by an adult male tortoise was found during spring 2003 surveys conducted by EPG.

#### 4.1.1.1.2 Burrowing Owl (*Athene cunicularia*)

Three burrowing owls were recorded along the Telecom Route by BRC in 2008 along the southern Telecom Route on actively farmed lands in the Palo Verde Valley. These owls were occupying burrows in irrigation ditch berms along existing unpaved roads. Several other burrowing owls were observed while driving in the agricultural area, indicating that they are common in that region.

#### 4.1.1.1.3 LeConte's Thrasher (*Toxostoma lecontei*)

LeConte's thrasher were frequently encountered during the 2008 walking surveys along the major washes supporting taller vegetation. It is likely that this species nests in the area, however; the pedestrian surveys were conducted after the typical nesting season, and no nesting sites were encountered.

#### 4.1.1.1.4 Mojave Fringe-toed Lizard (*Uma scoparia*)

Mojave fringe-toed lizards have historically been observed within the vicinity of the CRS (CPUC 2006) and more recently in large numbers throughout the sand dune areas of the northern and portions of the southeastern telecom lines (AECOM 2010).

#### 4.1.1.1.5 American Badger (*Taxidea taxus*)

During the course of the walking surveys, BRC biologists found a desiccated American badger skull and one inactive, likely badger den. The species likely occurs in the general vicinity of the proposed Telecom Route; however, there is little evidence that American badgers will be impacted by the project.

TABLE 2
Special-status Species with the Potential to Occur on the Telecom Route

| Scientific Name<br>Common Name | Status[1] | Habitat | Potential for Occurrence in Telecom Reroute | Flowering/ Activity Period |
|---|---|---|---|---|
| **Plants** | | | | |
| ***Acleisanthes longiflora***<br>angel trumpets | None / None / -- / 2.3 | Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest known location is 18 miles northeast of the site. | May |
| ***Ammoselinum giganteum***<br>desert sand-parsley | None / None / -- / 2.3 | Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest historic location is in the Chuckwalla Valley. | Mar–Apr |
| ***Astragalus insularis* var. *harwoodii***<br>Harwood's milk-vetch | None / None / -- / 2.2 | Desert dunes; Mojavean desert scrub (sandy or gravelly – mostly in creosote bush scrub) | Moderate potential to occur. Suitable habitat present.<br>The nearest known location is 4.4 miles north of the site. | Jan–May |
| ***Astragalus jaegerianus***<br>Lane Mountain milk-vetch | FE / None / -- / 1B.1 | Joshua tree woodland Mojavean desert scrub (sandy or gravelly) | No potential to occur.<br>No suitable habitat present.<br>Out of range for this species. | Apr–June |
| ***Astragalus lentiginosus* var. *coachellae***<br>Coachella Valley milk-vetch | FE / None / CV / 1B.2 | Sonoran desert scrub (sandy flats, washes, outwash fans, sometimes on dunes) | Low potential to occur.<br>Suitable habitat present.<br>The nearest known location is 37 miles northwest of the site. | Feb–May |
| ***Ayenia compacta***<br>California ayenia | None / None / -- / 2.3 | Mojavean desert scrub; Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest historic location is 35 miles west-northwest of the site. | Mar–Apr |

TABLE 2
Special-status Species with the Potential to Occur on the Telecom Route

| Scientific Name<br>Common Name | Status[1] | Habitat | Potential for Occurrence in Telecom Reroute | Flowering/<br>Activity Period |
|---|---|---|---|---|
| ***Camissonia arenaria***<br>mouse tail evening primrose | None / None / -- / 2.2 | Sonoran desert scrub (sandy or rocky) | Low potential to occur.<br>Suitable habitat present.<br>The nearest historic location is 14 miles to the southwest. | Nov–May |
| ***Castela emoryi crucifixion***<br>***crucifixion*** thorn | None / None / -- / 2.3 | Mojavean desert scrub; playas; Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest historic location is 11 miles southwest of the site. | Jun–Jul |
| ***Chamaesyce abramsiana***<br>Abram's spurge | None / None / -- / 2.2 | Mojavean desert scrub; Sonoran desert scrub (sandy) | No potential to occur.<br>Marginal habitat present. The nearest known historic location is 60 miles southwest of the site. | Sep–Nov |
| ***Colubrina californica***<br>California snake bush | None / None/ -- / 2.3 | Mojavean desert scrub; Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest known location is 17 miles to the north-northwest of the site. | Apr–Jun |
| ***Coryphantha alversonii***<br>Alverson's foxtail cactus | None / None / -- / 4.3 | Mojavean desert scrub; Sonoran desert scrub (sandy or rocky, usually granitic) | Moderate potential to occur. Suitable habitat present.<br>The nearest known location is 16 miles to the northeast of the site. | Apr–Jun |
| ***Cryptantha costata***<br>ribbed cryptantha | None / None./ 4.3 | Desert dunes, quite specific to loose drifting sand <1,625 feet. | High potential to occur.<br>Suitable habitat present.<br>Found within the survey area. | |
| ***Cryptantha holoptera***<br>winged cryptantha | None / None./ 4.3 | Sonoran desert scrub, primarily on rocky slopes <5,500 feet. | High potential to occur.<br>Suitable habitat present.<br>Found within the survey area. | |

TABLE 2
Special-status Species with the Potential to Occur on the Telecom Route

| Scientific Name<br>Common Name | Status[1] | Habitat | Potential for Occurrence in Telecom Reroute | Flowering/ Activity Period |
|---|---|---|---|---|
| ***Ditaxis clariana***<br>glandular ditaxis | None / None / CV / 2.2 | Mojavean desert scrub; Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest known location is 26 miles southwest of the site. | Oct–Mar |
| ***Ditaxis serrata* var. *californica***<br>California ditaxis | None / None / -- / 3.2 | Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest known location is 40 miles west of the site. | Mar–Dec |
| ***Eriastrum sparsiflorum* ssp. *harwoodii***<br>Harwood's woollystar | None / None / -- / 1B | Desert dune | High potential to occur.<br>Suitable habitat present.<br>Found within the survey area. | |
| ***Eriogonum viscidulum***<br>sticky buckwheat | FC / None / LC / -- | Deep, loose sandy soils in washes, flats, roadsides, steep aeolian slopes and stabilized dune areas | Low potential to occur.<br>Suitable habitat present.<br>Not known from California, but present in Clark County, Nevada, and Mohave County, Arizona. | Apr–Jun |
| ***Hymenoxys odorata***<br>bitter hymenoxys | None / None / -- / 2 | Riparian scrub; Sonoran desert scrub | Moderate potential to occur. Suitable habitat present.<br>The nearest known location is 8 miles south of the site. | Feb–Nov |
| ***Nemacaulis denudata* var. *gracilis***<br>slender woolly-heads | None / None / -- / 2.2 | Coastal dunes; Desert dunes; Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest known location is 60 miles northeast of the site. | Mar–May |

TABLE 2
Special-status Species with the Potential to Occur on the Telecom Route

| Scientific Name<br>Common Name | Status[1] | Habitat | Potential for Occurrence in Telecom Reroute | Flowering/ Activity Period |
|---|---|---|---|---|
| ***Opuntia wigginsii***<br>Wiggins' cholla | None / None / -- / 3.3 | Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>The nearest known location is 55 miles north of the site. | Mar |
| ***Salvia greatae***<br>Orocopia sage | None / None / CV / 1B.3 | Mojavean desert scrub; Sonoran desert scrub | Low potential to occur.<br>Suitable habitat present.<br>Nearest known locations 50 miles west of the site. | Mar–Apr |
| ***Senna covesii***<br>Coves's cassia | None / None / -- / 2.2 | Sonoran desert scrub (sandy) | Low potential to occur.<br>Suitable habitat present.<br>Nearest known location is 35 miles west of the site. | Mar–Jun |
| ***Teucrium cubense* ssp. *depressum***<br>dwarf germander | None / None / -- / 2.2 | Desert dunes; playas; Sonoran desert scrub | Moderate potential to occur. Suitable habitat present.<br>Nearest historic location 10 miles northwest of the site. | Mar–May |
| ***Wislizenia refracta* ssp. *palmeri***<br>Palmer's jackass clover | None / None / -- / 2.2 | Chenopod scrub; desert dunes; Sonoran desert scrub; Sonoran thorn woodland | Moderate potential to occur. Suitable habitat present. The nearest known location is 27 miles northwest of the site. | Jan–Dec |
| **Birds** | | | | |
| ***Athene cunicularia***<br>burrowing owl | FSC / SC / -- / BLMS | Flat grasslands and desert scrub; often associated with burrowing mammals | High potential to occur.<br>Suitable habitat present.<br>Multiple owls found within project area. | |
| ***Coccyzus americanus occidentalis***<br>Western yellow-billed cuckoo | FSC/ SE / LC&WR / BLMS | Riparian forests along broad lower flood-bottoms of large river systems, often with dense cottonwood and willow stands | Low potential to occur.<br>No suitable habitat.<br>Nearest known locations in the Blythe and Blythe NE quads along the Colorado River. | |

TABLE 2
Special-status Species with the Potential to Occur on the Telecom Route

| Scientific Name<br>Common Name | Status[1] | Habitat | Potential for Occurrence in Telecom Reroute | Flowering/ Activity Period |
|---|---|---|---|---|
| ***Colaptes chrysoides***<br>gilded flicker | None / SE / LC / BLMS | Sonoran desert habitat and riparian woodlands along the Colorado River; uses willows, cottonwoods, and tree yucca | Low potential to occur.<br>Marginal suitable habitat present. The nearest known occurrence is in the Big Maria Mountains quad along the Colorado River. | |
| ***Dendroica petechia sonorana***<br>Sonoran yellow warbler | -- / SC / LC / -- | Cottonwood-willow riparian forest | Low potential to occur.<br>Marginal suitable habitat present. Known to occur along the lower Colorado River. | |
| ***Empidonax traillii extimus***<br>Southwestern willow flycatcher | FE / SE / LC / -- | Riparian woodlands in Southern California | Low potential to occur.<br>Marginal suitable habitat present. Nearest known location in the Blythe quad along the Colorado River. | |
| ***Melanerpes uropygialis***<br>gila woodpecker | None / SE / LC / BLMS | Inhabits cottonwoods and other desert riparian trees, shade trees, and date palms | Low potential to occur.<br>Marginal suitable habitat present.<br>Nearest known locations are in the Blythe and Thumb Peak quads. | |
| ***Micrathene whitneyi***<br>elf owl | None / SE / LC / BLMS | Cottonwood-willow and mesquite riparian zone along the Colorado River | Low potential to occur.<br>Marginal suitable habitat present. Nearest known location in the Blythe quad along the Colorado River. | |
| ***Piranga rubra***<br>summer tanager | None / SC / LC / -- | Riparian woodlands | Low potential to occur.<br>Marginal suitable habitat present. Known to occur along the lower Colorado River. | |
| ***Pyrocephalus rubinus***<br>vermillion flycatcher | None / SC / LC / -- | Scrub, desert, cultivated lands, and riparian woodlands | Moderate potential to occur. Suitable habitat present. Populations in decline in the lower Colorado River valley. | |

TABLE 2
Special-status Species with the Potential to Occur on the Telecom Route

| Scientific Name<br>Common Name | Status[1] | Habitat | Potential for Occurrence in Telecom Reroute | Flowering/ Activity Period |
|---|---|---|---|---|
| ***Toxostoma crissale***<br>crissal thrasher | None / SC / -- / -- | Mojave and Sonoran deserts; desert washes and riparian thickets | Moderate potential to occur.<br>Suitable habitat present.<br>Known to occur in the vicinity of Blythe. | |
| ***Toxostoma lecontei***<br>Le Conte's thrasher | None / SC / -- / BLMS | Mojave and Sonoran deserts; saltbush scrub; cactus associations | High potential to occur.<br>Found several occurrences within the survey area. | |
| ***Vireo bellii arizonae***<br>Arizona Bell's vireo | None / SE / LC / -- | Summer resident along Colorado River in willow thickets | Low potential to occur.<br>Marginal suitable habitat present. Nearest known occurrence in Parker SW quad along Colorado River. | |
| ***Vireo bellii pusillus***<br>Least Bell's vireo | FE / SE / -- / -- | Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms. | Low potential to occur.<br>Marginal suitable habitat present. Nearest known locations in western Riverside County. | |
| **Mammals** | | | | |
| ***Antrozous pallidus***<br>pallid bat | None / SC / -- / BLMS | Rocky outcrops; desert riparian woodland; roost in crevices of rocks and buildings | Low potential to occur.<br>Limited roosting areas. | |
| ***Chaetodipus penicillatus sobrinus***<br>desert pocket mouse | None / None / LC / -- | Desert scrub of the Mojave and Sonoran deserts | Moderate potential to occur. Suitable habitat present.<br>Within known range. | |
| ***Taxidea taxus***<br>American badger | None / SC / -- / -- | Open plains; farmlands; edges of woodlands | Moderate potential to occur. Suitable habitat present.<br>Within known range. | |

TABLE 2
Special-status Species with the Potential to Occur on the Telecom Route

| Scientific Name<br>Common Name | Status[1] | Habitat | Potential for Occurrence in Telecom Reroute | Flowering/ Activity Period |
|---|---|---|---|---|
| ***Xerospermophilus tereticaudus chlorus***<br>Palm Springs round-tailed ground squirrel | FC / None / CV / BLMS | Desert southwest, often burrowing under mesquite and creosote | Low potential to occur.<br>Suitable habitat present. | |
| **Reptiles** | | | | |
| ***Gopherus agassizii***<br>desert tortoise | FT / ST / LC / -- | Desert scrub, desert wash, and Joshua tree habitats | Low potential to occur.<br>Suitable habitat present.<br>Nearest known location in Big Maria Mountains SW quad. | |
| ***Phrynosoma mcalli***<br>Flat-tailed Horned Lizard | FT / SC / LC / BLMS | Sandy desert flats with sparse vegetation | Low potential to occur.<br>Suitable habitat present.<br>Sonoran desert endemic. | |
| ***Uma scoparia***<br>Mojave fringe-toed lizard | None / SC / -- / BLMS | Restricted to aeolian dune systems and other fine sand areas within desert scrub and washes | High potential to occur.<br>Suitable habitat present.<br>Found several occurrences within the survey area. | |

Notes:

Sources:
California Native Plant Society, 2010; California Natural Diversity Database, 2010; Consortium of California Herbaria, 2010; California Department of Fish and Game, 2010.

[1] Conservation status abbreviations:

United States Fish and Wildlife Service designations:

FE–Endangered: Any species in danger of extinction throughout all or a significant portion of its range.

FT–Threatened: Any species likely to become endangered within the foreseeable future.

FSC–Species of Concern: Informal term for species that are declining or appear to be in need of conservation.

FC–Candidate species for federal listing.

California state designations:

SE–Endangered: Any species in danger of extinction throughout all or a significant portion of its range.

ST–Threatened: Any species likely to become endangered within the foreseeable future.

SR–Rare: Any species not currently threatened with extinction, but in such small numbers throughout its range that it may become endangered if its present environment worsens.

SH–Historical: All sites for this species are historical; the element has not been seen for at least 20 years but suitable habitat still exists in the state.

SC–Species of Concern: extirpated, listed as threatened or endangered by ESA but not CESA, meets definition of State threatened or endangered but has not been listed, is experiencing serious population decline, or having a naturally small population susceptible to risk factors.

Multiple Species Habitat Conservation Plans (MSHCP):

LC–Lower Colorado River Multiple-Species Habitat Conservation Program Final Habitat Conservation Plan

CV–Coachella Valley MSHCP

WR –Western Riverside County MSHCP

Rare Plant Rank (RPR) designations (CNPS 2010):

List 1B–Plants rare, threatened or endangered in California and elsewhere

List 2–Plants rare, threatened or endangered in California, but more common elsewhere

List 3–Plants for which more information is needed; a review list

List 4–Plants of limited distribution; a watch list

Threat categories:

List .1–Seriously endangered in California

List .2–Fairly endangered in California

List .3–Not very endangered in California

Bureau of Land Management (BLM)

BLMS–BLM Sensitive Species

# 4.2 Impact Summary

## 4.2.1 Plants

During field efforts in 2010, four special-status plants were found in the CRS area, including Harwood's milkvetch, Harwood's woollystar, ribbed cryptantha and winged cryptantha (AECOM, 2010). Ribbed cryptantha and Harwood's milk-vetch were found within the 200-ft buffer along the northern and southern telecom routes near CRS. Winged cryptantha and Harwood's woollystar were found within the CRS one mile buffer, but not within the Telecom Route that lies within the CRS survey area

If special-status plant species are observed during the preconstruction surveys and cannot be avoided, notification will be made to the appropriate authorities and/or measures outlined in the Project Transplant Plan will be implemented.

## 4.2.2 Wildlife

#### 4.2.2.1.1 Desert Tortoise (*Gopherus agassizii*)

Suitable habitat is present for desert tortoise along the southern portion of the Telecom Route. Desert tortoise and tortoise sign were found in various locations, primarily along the upland mesa section of the southern telecom line. Anticipated impacts at these locations have been incorporated within the project's Endangered Species Act (ESA) Section 7 consultation and will be offset/mitigated per the Biological Opinion's conservation measures for the desert tortoise (USFWS, 2010b). In accordance with the Project's Biological Opinion, an Authorized Biologist will conduct clearance surveys and burrow excavation following procedures outlined in the Service's *Desert Tortoise Field Manual* (December 2009), or more current guidance, and will be present during all construction activities in desert tortoise habitat (modeled, critical habitat, and/or occupied habitat) during the tortoises more-active season (April through May and September through October). Additionally, SCE will implement all of the applicable FEIR/FEIS mitigation measures and APMs for desert tortoise (MM B-7b, MM B-7c, MM B-9c, APM B-18, APM B-27, APM B-28, APM B-29, APM B-30, APM B-31, APM B-32, APM B-35).

#### 4.2.2.1.2 Burrowing Owl (*Athene cunicularia*)

Burrowing owls were observed near the agricultural areas along 22nd ave. If burrowing owls are found onsite and cannot be avoided, MM B-9e would be implemented. Preconstruction surveys to locate the owls and avoidance of their burrows should be sufficient to allow them to continue to occupy the survey area with minimal disturbance.

Preconstruction surveys for burrowing owl and their burrows will be conducted no more than 30 days prior to construction activities per existing FEIR/FEIS mitigation measure B-9e. If active owl burrows are discovered during pre-construction surveys, owls would be evicted from the burrows using either active or passive techniques as recommended by the BLM and Burrowing Owl Consortium.

#### 4.2.2.1.3 LeConte's Thrasher (*Toxostoma lecontei*)

LeConte's thrasher were frequently encountered during the 2008 walking surveys along the major washes supporting taller vegetation. It is likely that this species nests in the area,

however; the pedestrian surveys were conducted after the typical nesting season, and no nesting sites were encountered.

To reduce potential impacts, MM B-5a would be implemented. Preconstruction surveys for nesting birds should identify potential conflicts with installation of the telecommunications system. Nesting sites can be identified, and a protective buffer zone can be enforced to avoid disturbance of nesting sites.

#### 4.2.2.1.4 Mojave Fringe-toed Lizard (*Uma scoparia*)

Mojave fringe-toed lizards have historically been observed within the vicinity of the CRS (CPUC 2006) and more recently in large numbers throughout the sand dune areas of the northern and portions of the southeastern telecom lines (AECOM 2010). Mojave fringe-toed lizards are listed as CDFG species of concern and BLM sensitive. Their limited and isolated habitat with an extreme adaptation to dune habitats makes the local population vulnerable to projects within the sand dune areas. Because these lizards are sand dune-obligates, loss of sand dune habitat in the survey area would likely reduce the local population. Implementation of APMs, MM B-9b, and MM B- 9d would reduce potential impacts to this species to less than significant levels (CPUC 2006).

#### 4.2.2.1.5 American Badger (*Taxidea taxus*)

During the course of the walking surveys, BRC biologists found a desiccated American badger skull and one inactive, likely badger den. The species likely occurs in the general vicinity of the proposed Telecom Route; however, there is little evidence that American badgers will be impacted by the project. Preconstruction surveys would determine if active burrows are present. If badgers are found during construction clearance surveys and cannot be avoided, MM B-9g would be implemented.

### 4.2.3 Vegetation Communities

The predominant vegetation type along the northern Telecom Route is creosote bush (*Larrea tridentata*) scrub. Creosote bush and white bursage (*Ambrosia dumosa*) dominate the plant assemblage throughout the area, although in the larger dune fields, big galleta (*Pleuraphis rigida*) and birdcage evening primrose (*Oenothera deltoides*) largely replace the bursage. Partially stabilized desert dunes occur along the northern route leading directly into CRS. Desert dune habitat consists of open sand dunes with occasional woody shrubs and a variety of annual and perennial herbs adapted to existing in shifting sands.

The southeastern telecom line comprises partially stabilized desert dune as it exits CRS, transitions to creosote bush, then traverses agricultural and developed areas until it ties in to the BSC.

The one sensitive community located along the Telecom Route is the creosote bush scrub – big galleta association, usually found in a dune complex. CDFG ranks this vegetation cover as G1 S1, which is globally and state critically imperiled. This sensitive community occurs in the northern and southern telecom route along existing roads (Blythe Way and DV1 access roads respectively) in small easily avoidable patches so impacts to this vegetation community are not expected to occur (Figure 2A). Work would be done on or from existing roads to minimize the impact to this sensitive community.

The total permanent disturbance area for the Telecom Route poles is not expected to exceed 0.06 acre (approximately 100 poles with 25 square feet of impact each). The final alignment

of the southeastern telecom line will be defined during more detailed engineering. Temporary impacts are not known at this point; however, impacts are expected to be small as a result of the installation method and alignment placement. The majority of new poles will be placed alongside existing roads and will be installed using a truck mounted auger. The northern telecom line will leave the CRS attached to the new distribution line for 22 poles and then go east using existing poles. Impacts for this segment are accounted for with the installation of the CRS station light and power, with the current assumption being 0.01 acre for the poles and 0.8 acre for temporary impacts associated with the new access road north out of the substation.

The following section describes the vegetation communities found within a 200-foot buffer of the Telecom Route. Descriptions for the vegetation communities were derived from *Vegetation Communities Mapping for the Devers to Palo Verde No. 2 Project* (Dudek 2009).

#### 4.2.3.1 Agricultural

Agriculture is not described in the *List of Terrestrial Natural Communities* (CDFG 2003) or the *List of California Vegetation Alliances* (CDFG 2009) because it is not a naturally occurring community. Agriculture refers to land that is set aside for cultivating crops. Agriculture occurs across a wide range of elevations, topographic orientations, and soil types.

#### 4.2.3.2 Allscale Scrub

The allscale scrub (*Atriplex polycarpa*) alliance is recognized by both the *List of Terrestrial Natural Communities* (CDFG 2003) and the *List of California Vegetation Alliances* (CDFG 2009a). There are no associations within the allscale scrub alliance. Allscale scrub alliance communities include allscale as the sole or dominant shrub in the canopy. Allscale scrub has a continuous or open shrub canopy less than 3 meters (10 feet) in height with a variable ground layer (Sawyer et al. 2009).

#### 4.2.3.3 Arrow Weed Thicket

The arrow weed (*Pluchea sericea*) thickets alliance is recognized by both the *List of Terrestrial Natural Communities* (CDFG 2003) and the *List of California Vegetation Alliances* (CDFG 2009a). There are no associations within the arrow weed thickets alliance. Arrow weed thickets alliance communities include arrow weed as the dominant or codominant shrub in the canopy. Arrow weed thickets have an intermittent to continuous shrub canopy less than 5 meters (16 feet) in height and a sparse ground layer with seasonal annuals (Sawyer et al. 2009).

Species associated with the arrow weed thickets alliance include iodine bush (*Allenrolfea occidentalis*), saltbushes, (*A. confertifolia*, *A. hymenelytra*, and *A. polycarpa*), mulefat (*Baccharis salicifolia*), Emory's baccharis (*Baccharis emoryi*), black willow (*Salix nigra*), bush seepweed (*Suaeda moquinii*), and tamarisk (*Tamarix* sp.). Emergent Fremont cottonwood (*Populus fremontii*), black cottonwood (*Populus trichocarpa*), and honey mesquite (*Prosopis glandulosa*) may also occur in stands of this alliance (Sawyer et al., 2009). Arrow weed thickets often occur in wetlands that are seasonally flooded and saturated with fresh water located around seeps, canyon bottoms, irrigation ditches, stream sides, and washes (Sawyer et al., 2009). Soils in which this alliance is found are generally alkaline or saline clay loams or alluvial- or aeolian-derived sands (Sawyer et al., 2009).

#### 4.2.3.4 Creosote Bush Scrub

The creosote bush scrub alliance is recognized by both the *List of Terrestrial Natural Communities* (CDFG, 2003) and the *List of California Vegetation Alliances* (CDFG, 2009a). Within the creosote bush scrub alliance, there are 14 associations, mostly described by Keeler-Wolf and Thomas (2000). Creosote bush scrub alliance communities include creosote bush as the dominant or codominant shrub in the canopy. Creosote bush scrub has an intermittent to open shrub canopy less than 3 meters (10 feet) in height with an open to intermittent ground layer of seasonal annuals or perennial grasses (Sawyer et al., 2009).

Species associated with the creosote bush scrub alliance include goldenheads (*Acamptopappus shockleyi, A. sphaerocephalus*), white bursage, cheesebush (*A. salsola*), saltbushes, brickellbush (*Brickellia incana*), brittlebush (*Encelia farinosa*), ephedras (*Ephedra californica* and *E. nevadensis*), and Anderson's desert thorn (*Lycium andersonii*). Emergent honey mesquite (*Prosopis glandulosa*) or Joshua tree (*Yucca brevifolia*) may also be present (Sawyer et al., 2009).

The creosote bush scrub alliance often occurs on alluvial fans, bajadas, upland slopes, and minor intermittent washes. Soils on which this alliance occurs are well drained and may have pavement surface (Sawyer et al., 2009).

Onsite, the creosote bush scrub alliance forms an open shrub layer. The herbaceous layer is generally poorly developed in established stands. In the onsite alliance, creosote bush generally attains greater than 3 percent cover and exceeds other shrub in cover. Associated species in this alliance onsite include white bursage, brittlebush, cheesebush, big galleta (*Pleuraphis rigida*), indigo bush (*Psorothamnus* spp.), Emory's indigo bush (*P. emoryi*), and sweetbush (*Bebbia juncea*). The tree layer is emergent, open, occasional, and may include blue palo verde *(Cercidium floridum sp.*) and ironwood (*Olneya tesota*). The herbaceous layer is diverse and sometimes includes plantain (*Plantago* spp.), cryptantha (*Cryptantha* sp.), plicate coldenia (*Tiquilia plicata*), and California croton (*Croton californicus*).

Creosote bush scrub was generally mapped at the alliance level. However, where more specific associations could be identified, the alliance was characterized at the more-specific association level.

#### 4.2.3.5 Blue Palo Verde Woodland

The blue palo verde woodland alliance is recognized by the *List of Terrestrial Natural Communities* (CDFG, 2003), but not the *List of California Vegetation Alliances* (CDFG, 2009a). Within the blue palo verde woodland alliance, there are two associations, described by Spolsky (1979) and Keeler-Wolf et al. (2001). Blue palo verde woodland alliance communities include blue palo verde at greater than 3 percent cover with cover of this species not exceeded by other species of microphyllous (small-leaved) tall shrub or tree (Keeler-Wolf et al., 1998). Blue palo verde woodland has a sparse small tree or tall shrub canopy (Evens and Hartman, 2007). Species associated with blue palo verde woodland include blue palo verde, ironwood, creosote bush, and cheesebush (Evens and Hartman, 2007).

The blue palo verde woodland alliance often occurs in washes (Evens and Hartman, 2007). Onsite, the blue palo verde woodland alliance forms an open shrub or tree layer, commonly observed in washes. Blue palo verde attains at least 3 percent cover and is not exceeded by

other tall shrubs or trees. Associated species included in the onsite alliance include creosote bush, indigo bush, brittlebush, smoke tree (*Psorothamnus spinosus*), white bursage, Emory's indigo bush, ocotillo (*Fouquieria splendens sp.*), sweetbush, and cheesebush.

#### 4.2.3.6 Creosote Bush-Big Galleta

On site, creosote bush–big galleta was mapped in stands of creosote bush scrub where the tufted perennial big galleta grass was evenly distributed in the understory (Evens and Hartman 2007). Associated species in this association on site include white bursage, brittle spineflower (*Chorizanthe brevicornu sp.*), woolly plantain (*Plantago ovata*), popcorn flower (*Cryptantha* sp.), mustard, pebble pincushion (*Chaenactis carphoclinia sp.*), wirelettuce (*Stephanomeria pauciflora*), cheesebush, desert sun cup (*Camissonia boothii*), wild turnip (*Arisaema triphyllum)*, silver or golden cholla (*Cylindropuntia echinocarpa*), white dalea (*Psorothamnus emoryi*), and blue palo verde.

#### 4.2.3.7 Creosote Bush–White Bursage Scrub

The creosote bush–white bursage scrub (*Larrea tridentata–Ambrosia dumosa*) alliance is recognized by both the *List of Terrestrial Natural Communities* (CDFG, 2003) and the *List of California Vegetation Alliances* (CDFG, 2009a). Within the creosote bush–white bursage scrub alliance, there are 41 associations, mostly described by Keeler-Wolf and Thomas (2000). Creosote bush–white bursage scrub alliance communities include creosote bush and white bursage as codominant shrubs in the canopy. Creosote bush–white bursage scrub has a two-tiered shrub canopy less than 3 meters (10 feet) in height with an open to intermittent ground layer in which annuals are seasonally present (Sawyer et al., 2009).

Species associated with the creosote bush–white bursage scrub alliance include chaffbush (*Amphipappus fremontii*), saltbushes, sweetbush, California croton, brittlebush, ephedras, box thorn (*L. andersonii*), indigo bush (*Amorpha fruticosa*), bladder sage (*Salazaria mexicana*), and spiny senna (*Senna armata*). Emergent Joshua tree or ocotillo may also be present at a low cover (Sawyer et al., 2009).

The creosote bush–white bursage scrub alliance often occurs in minor washes and rills, on alluvial fans, bajadas, and upland slopes. Soils on which this alliance occurs are well drained, alluvial, colluvial, sandy, and may have desert pavement surface (Sawyer et al., 2009; NatureServe, 2009).

Onsite, the creosote bush–white bursage scrub alliance forms an open shrub layer. Generally, this alliance was mapped in stands dominated by a relatively equal mixture of creosote bush and white bursage, both evenly distributed throughout the stand. No other shrub species greatly exceeds these species in cover. Some associates of this alliance onsite include California croton, indigo bush, big galleta, fourwing saltbush (*Atriplex canescens*), cheesebush, wild turnip (*Arisaema triphyllum*), Thurber's sandpaper plant (*Petalonyx thurberi*), allscale (*A. polycarpa*), desert trumpet, storksbill, and cholla.

#### 4.2.3.8 Developed Land

Developed areas are not described in the *List of Terrestrial Natural Communities* (CDFG, 2003) or the *List of California Vegetation Alliances* (CDFG, 2009a) because they are not naturally occurring communities in California. Areas mapped as developed include roads, buildings, and structures. Vegetation in these areas, if present at all, is usually sparse, dominated by weedy herbaceous species, or part of the landscaping associated with development.

Developed areas occur across a wide range of elevations, topographic orientations, and soil types.

#### 4.2.3.9 Ironwood Woodland

The ironwood woodland alliance is recognized by the *List of Terrestrial Natural Communities* (CDFG, 2003), but not the *List of California Vegetation Alliances* (CDFG, 2009a). Within the ironwood woodland alliance, there are two associations, described by Spolsky (1979) and Keeler-Wolf et al. (2001). Ironwood woodland alliance communities typically include greater than 3 percent cover of ironwood, including shrub and trees together, and ironwood cover is not exceeded by other species of microphyllous (small-leaved) tall shrub or tree in a single stand (Evens and Hartman, 2007).

Ironwood woodland generally has a regular presence of creosote bush attaining up to 5 percent cover. Other species associated with the ironwood woodland alliance include white bursage, cheesebush, white rhatany (*Krameria grayi*), box thorn, and blue palo verde (Evens and Hartman, 2007). The ironwood woodland alliance often occurs on washes and adjacent bajadas or lower slopes of hills (Keeler-Wolf et al., 1998). Cryptogamic crust, composed of seedless plants and plant-like organisms, may be well developed in areas of ironwood woodland, especially on less-disturbed sites (Evens and Hartman, 2007).

Onsite, the ironwood woodland alliance forms an open shrub or tree layer. Ironwood attains at least 3 percent cover and is not exceeded by other tall shrubs or trees. This alliance commonly forms in washes. Associated species recorded within the onsite alliance include creosote bush, indigo bush, blue palo verde, box thorn, white bursage, cheesebush, chollas, ocotillo, and sweetbush. The herbaceous layer also includes cryptantha, rattlesnake weed (*Euphorbia albomarginata*), woolly plantain, common Mediterranean grass, and wild turnip.

#### 4.2.3.10 Mesquite Dune Scrub

Mesquite dune scrub (CDFG 2003) is the only association mapped on site within the mesquite bosque, mesquite thicket alliance. On site, the mesquite dune scrub forms an open shrub layer on partially stabilized dunes. Mesquite attains at least 3 percent cover in stands of this alliance on site. Other associated species include creosote bush, white bursage, and allscale.

#### 4.2.3.11 Open Pavement

The non-vegetated desert general habitat type is recognized by the *List of Terrestrial Natural Communities* (CDFG 2003), but not the *List of California Vegetation Alliances* (CDFG 2009a). Open pavement sparse vegetation refers to areas on site where the desert surface is covered with tightly packed, interlocking rock fragments (ACOE 2010) that appear similar to road pavement.

#### 4.2.3.12 Ornamental

Ornamental is not described in the *List of Terrestrial Natural Communities* (CDFG 2003) or the *List of California Vegetation Alliances* (CDFG 2009a) because this community is not a naturally occurring community in California. Areas mapped as ornamental include planted areas where ornamental landscaping has been installed.

#### 4.2.3.13 Partially Stabilized Desert Dune

The stabilized and partially stabilized desert dunes alliance is recognized by the *List of Terrestrial Natural Communities* (CDFG 2003), but not the *List of California Vegetation Alliances* (CDFG 2009a). There are no associations within the stabilized and partially stabilized desert dunes alliance. Stabilized and partially stabilized dunes are accumulations of dune sand in the desert that are stabilized or partially stabilized by evergreen or deciduous shrubs, scattered annuals, and perennial grasses (Holland 1986). This alliance has an open shrub canopy that increases in total vegetative cover as dunes are progressively stabilized (Holland 1986).

Species associated with the stabilized and partially stabilized desert dunes alliance include sand verbena (*Abronia villosa*), white bursage (*Ambrosia dumosa*), milkvetch (*Astragalus* spp.), fourwing saltbush (*Atriplex canescens*), California croton (*Croton californicus*), prairie clover (*Dalea* spp.), Colorado Desert buckwheat (*Eriogonum deserticola*), hairy desert sunflower (*Geraea canescens*), desert lily (*Hesperocallis undulata*), big galleta (*Pleuraphis rigida*), creosote bush (*Larrea tridentata*), birdcage evening primrose (*Oenothera deltoids*), Spanish needles (*Palafoxia arida*), Thurber's sandpaper plant (*Petalonyx thurberi*), honey mesquite (*Prosopis glandulosa*), psorothamnus (*Psorothamnus* spp.), canaigre (*Rumex hymenosepalus*), and crinklemat (*Tiquilia* spp.) (Holland 1986).

The stabilized and partially stabilized desert dunes alliance often occurs on sites that are typically lower than active dunes. Stabilized and partially stabilized desert dunes retain water just underneath the sand surface, which enables perennial vegetation to survive long drought periods. Soils are sandy (Holland 1986).

The stabilized and partially stabilized desert dunes alliance forms an open shrub layer on sandy dunes. In the on-site alliance, creosote bush is present throughout the stand and ranges in cover from very scattered (1 percent or less) to 10 percent cover. Associated species in this alliance on site include white bursage and Russian thistle (*Salsola tragus*). In addition, approximately 12 percent of the stabilized and partially stabilized desert dunes on site are considered disturbed due to the presence of roughly 10 percent non-native wild turnip (*Brassica tournefortii*) in the herbaceous layer, as well as depositions of trash or debris.

#### 4.2.3.14 White Bursage

The white bursage scrub (*Ambrosia dumosa*) alliance is recognized by both the *List of Terrestrial Natural Communities* (CDFG 2003) and the *List of California Vegetation Alliances* (CDFG 2009a). Within the white bursage scrub alliance, there are five associations, mostly described by Keeler-Wolf et al. (1998) and Keeler-Wolf et al. (2001). White bursage dwarf scrub alliance communities include white bursage as the dominant or codominant shrub in the canopy. White bursage dwarf scrub has an open to intermittent canopy and is less than 1 meter (3 feet) in height with an open ground layer in which annuals are seasonally present (Sawyer et al. 2009).

Species associated with the white bursage dwarf scrub alliance include saltbushes (*Atriplex* spp.), teddy-bear cholla *(Cylindropuntia bigelovii*), Death Valley ephedra (*Ephedra funerea*), brittlebush, creosote bush, and beavertail cactus (*Opuntia basilaris*) (Sawyer et al. 2009). Emergent taller shrubs may be present at a low cover and may include creosote and ocotillo (Sawyer et al. 2009). The white bursage dwarf scrub alliance often occurs on older washes and river terraces, alluvial fans, bajadas, and upland slopes. Soils on which this alliance

occurs are sandy, clay rich, or calcareous and may have pavement surface (Sawyer et al. 2009).

On site, the white bursage scrub alliance includes white bursage as the major woody species (generally greater than 5 percent cover) with at least twice the cover of creosote bush and exceeding cover brittlebush. Other associated species on site include Thurber's sandpaper plant, wild turnip, tamarisk (*Tamarix* sp.), California croton, cheesebush, desert trumpet, spiny senna, and fagonia. Approximately 10 acres (16 percent) of the white bursage scrub alliance on site is considered disturbed.

White bursage scrub was generally mapped at the alliance level. However, where associations could be identified, the alliance was characterized at the more specific association level. White bursage, terrace association (CDFG 2003) was the only association within the white bursage scrub alliance mapped on site. White bursage, terrace association occurs in one stand on site where the alliance is found in association with the upland terrace immediately adjacent to a wash.

### 4.2.4 Jurisdictional Waters

There are no jurisdictional features that traverse the Telecom Route or 200-foot buffer.

# 5.0 Conclusions

Based on the results of the literature review, habitat assessment, and focused surveys, several special-status biological resources were found along or near the Telecom Route. During field efforts in 2010, four special-status plants were found in the CRS area, including Harwood's milkvetch, Harwood's woollystar, ribbed cryptantha and winged cryptantha (AECOM, 2010). Ribbed cryptantha and Harwood's milk-vetch were found within the 200-ft buffer along the northern and southern telecom routes near CRS. Winged cryptantha and Harwood's woollystar were found within the CRS one mile buffer, but not within the Telecom Route that lies within the CRS survey area. Preconstruction clearance surveys are recommended for 8 plant species. The focused plant surveys should occur between April and May in order to detect each species during flowering/fruiting. If special-status plant species are encountered during the preconstruction surveys, they will be addressed in accordance with the Project APMs and mitigation measures.

Numerous Mojave fringe-toed lizard were found in the partially stabilized dunes around CRS. Because these lizards are sand dune-obligates, loss of sand dune habitat in the survey area would likely reduce the local population. Implementation of APMs, MM B-9b, and MM B- 9d would reduce potential impacts to this species to less than significant levels (CPUC 2006).

Burrowing owls were observed near the agricultural areas along 22nd ave. If burrowing owls are found onsite and cannot be avoided, MM B-9e would be implemented. Preconstruction surveys for burrowing owl and their burrows will be conducted no more than 30 days prior to construction activities per existing FEIR/FEIS mitigation measure B-9e. If active owl burrows are discovered during pre-construction surveys, owls would be evicted from the burrows using either active or passive techniques as recommended by the BLM and Burrowing Owl Consortium. Preconstruction surveys to locate the owls and avoidance of their burrows should be sufficient to allow them to continue to occupy the survey area with minimal disturbance.

Suitable habitat is present for desert tortoise along the southern portion of the Telecom Route. Desert tortoise and tortoise sign were found in various locations, primarily along the upland mesa section of the southern telecom line. Anticipated impacts at these locations have been incorporated within the project's Endangered Species Act (ESA) Section 7 consultation and will be offset/mitigated per the Biological Opinion's conservation measures for the desert tortoise (USFWS, 2010b). In accordance with the Project's Biological Opinion, an Authorized Biologist will conduct clearance surveys and burrow excavation following procedures outlined in the Service's *Desert Tortoise Field Manual* (December 2009), or more current guidance, and will be present during all construction activities in desert tortoise habitat (modeled, critical habitat, and/or occupied habitat) during the tortoises more-active season (April through May and September through October). Additionally, SCE will implement all of the applicable FEIR/FEIS mitigation measures and APMs for desert tortoise (MM B-7b, MM B-7c, MM B-9c, APM B-18, APM B-27, APM B-28, APM B-29, APM B-30, APM B-31, APM B-32, APM B-35).

In total, pre-construction clearance surveys required by the existing FEIR/FEIS are anticipated along the Telecom Route for 13 special-status species (8 plant species and five wildlife species). Additionally, preconstruction nesting bird surveys will be required as all of the Project areas that provide some potentially suitable nesting habitat for avian species (MM B-5a). If breeding birds with active nests are found, a biological monitor shall establish a 300-foot buffer (subject to adjustment based on local factors) around the nest for ground-based construction activities.

Since the majority of the Telecom system will be installed on existing towers or poles, and access will be acquired on existing roads, impacts to sensitive biological resources would be minimized.

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# Figures

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1 inch = 11 miles

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Miles

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**Devers-Palo Verde No.2 Transmission Line Project** | 2010



Source: Southern California Edison / California Resources Agency Legacy Project 2005 / USDA Forest Service / ESRI

Project features shown represent best available SCE data as of September 17, 2010. Project features may change.

***LEGEND***

- Proposed Substation
- Existing Substation

**DPV2 Proposed 500 kV Route**

- Colorado River to Devers
- Devers to Valley
- Proposed Construction Yard Location
- Telecom Alignment
- County Boundary
- Railroad
- Interstate/US Route

**Land Ownership**

- Federal
- Tribal
- Military
- Park/Forest
- Incorporated Cities
- Private
- State
- Water Body
- Area of Critical Environmental Concern (BLM)

**Figure 1**

**PROJECT LOCATION MAP**
TELECOM ALIGNMENT

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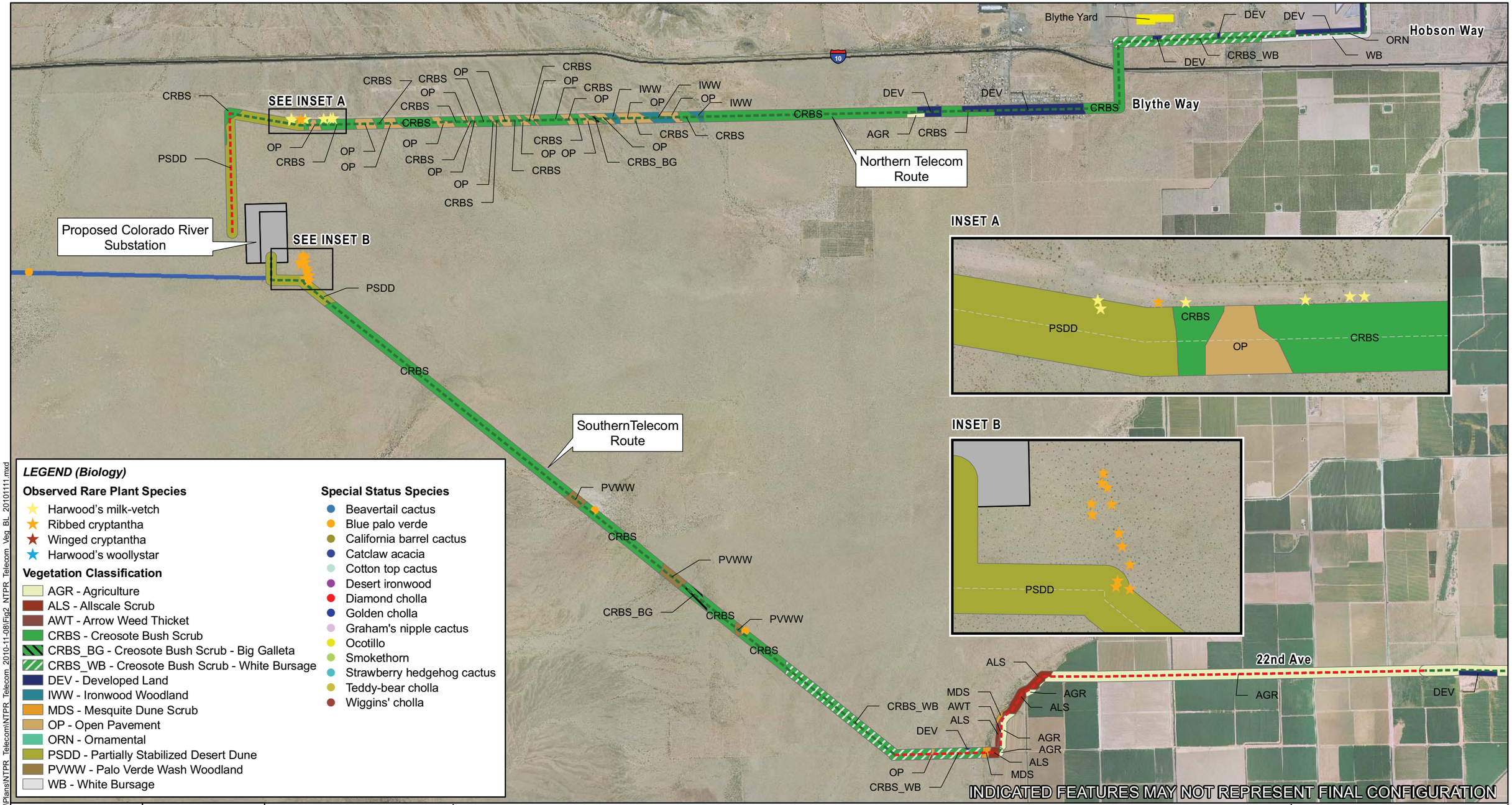


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***LEGEND (Biology)***

**Observed Rare Plant Species**

- Harwood's milk-vetch
- Ribbed cryptantha
- Winged cryptantha
- Harwood's woollystar

**Vegetation Classification**

- AGR - Agriculture
- ALS - Allscale Scrub
- AWT - Arrow Weed Thicket
- CRBS - Creosote Bush Scrub
- CRBS_BG - Creosote Bush Scrub - Big Galleta
- CRBS_WB - Creosote Bush Scrub - White Bursage
- DEV - Developed Land
- IWW - Ironwood Woodland
- MDS - Mesquite Dune Scrub
- OP - Open Pavement
- ORN - Ornamental
- PSDD - Partially Stabilized Desert Dune
- PVWW - Palo Verde Wash Woodland
- WB - White Bursage

**Special Status Species**

- Beavertail cactus
- Blue palo verde
- California barrel cactus
- Catclaw acacia
- Cotton top cactus
- Desert ironwood
- Diamond cholla
- Golden cholla
- Graham's nipple cactus
- Ocotillo
- Smokethorn
- Strawberry hedgehog cactus
- Teddy-bear cholla
- Wiggins' cholla

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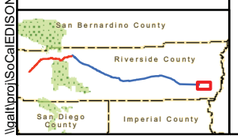


1 inch = 3,500 feet

0 3,500

Feet

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**Devers-Palo Verde No.2 Transmission Line Project** | 2010



***LEGEND (Engineering Features)***

**DPV2 Proposed 500 kV Route**

- Colorado River to Devers
- Devers to Valley

**Telecom Route**

- Proposed Alignment
- Proposed New Pole Alignment

- Existing or Proposed Substation
- Proposed Construction Yard
- Railroad
- Interstate/US Route

**Figure 2A**

**OVERVIEW MAP**

TELECOM ALIGNMENT
VEGETATION COMMUNITIES AND
RARE PLANT OBSERVATIONS

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Buck Substation
Blythe Yard
DEV
DEV
ORN
WB
Hobson Way
DEV
CRBS_WB
Blythe Service Center
14th Ave
DEV
DEV
DEV
CRBS
Blythe Way
RBS
AGR
CRBS
Northern Telecom Route
Lovekin Blvd
DEV
AGR
AGR
S. Broadway
DEV
AGR
DEV
SouthernTelecom Route
DEV
DEV
22nd Ave
22nd Ave
DEV
ALS
MDS
AGR
AGR
DEV
AGR
AGR
CRBS_WB
AWT
ALS
ALS
DEV
INDICATED FEATURES MAY NOT REPRESENT FINAL CONFIGURATION

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- Teddy-bear cholla
- Wiggins' cholla

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SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL™ Company

San Bernardino County
Riverside County
San Diego County
Imperial County

1 inch = 3,500 feet
0 3,500
Feet

Source: Southern California Edison / California Resources Agency Legacy Project 2005 / USDA Forest Service
Imagery Source: 2007, 2008, 2009 1ft resolution flown aerial imagery, Eagle Aerial Imaging

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**Devers-Palo Verde No.2 Transmission Line Project** | 2010



***LEGEND (Engineering Features)***

**DPV2 Proposed 500 kV Route**
- Colorado River to Devers
- Devers to Valley

**Telecom Route**
- Proposed Alignment
- Proposed New Pole Alignment

- Existing or Proposed Substation
- Proposed Construction Yard
- Railroad
- Interstate/US Route

**Figure 2B**

**OVERVIEW MAP**
TELECOM ALIGNMENT
VEGETATION COMMUNITIES AND
RARE PLANT OBSERVATIONS

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Blythe Yard

Hobson Way

Blythe Way

Northern Telecom Route

Proposed Colorado River Substation

SouthernTelecom Route

22nd Ave

INDICATED FEATURES MAY NOT REPRESENT FINAL CONFIGURATION

***LEGEND (Biology)***

**Desert Tortoise**
- Adult Tortoise
- Occupied Burrow
- Burrow
- Bone Fragment
- Scat

**Other**
- Burrowing Owl
- Le Conte's thrasher
- Loggerhead Shrike
- Mojave Fringe-toed Lizard
- Unknown Raptor Nest

- Northern Harrier
- Cooper's Hawk
- Red-tailed Hawk
- Swainson's Hawk
- Ferruginous Hawk

SOUTHERN CALIFORNIA EDISON
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San Bernardino County
Riverside County
San Diego County
Imperial County

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**Devers-Palo Verde No.2 Transmission Line Project** | 2010



***LEGEND (Engineering Features)***

**DPV2 Proposed 500 kV Route**
- Colorado River to Devers
- Devers to Valley

**Telecom Route**
- Proposed Alignment
- Proposed New Pole Alignment

- Existing or Proposed Substation
- Proposed Construction Yard
- Railroad
- Interstate/US Route

**Figure 3A**

**OVERVIEW MAP**
TELECOM ALIGNMENT
WILDLIFE OBSERVATIONS

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Buck Substation

Blythe Yard

Hobson Way

Blythe Service Center

Blythe Way

14th Ave

Northern Telecom Route

Lovekin Blvd

S. Broadway

SouthernTelecom Route

22nd Ave

22nd Ave

INDICATED FEATURES MAY NOT REPRESENT FINAL CONFIGURATION

***LEGEND (Biology)***

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Riverside County
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- Proposed New Pole Alignment

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- Proposed Construction Yard
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**Figure 3B**

**OVERVIEW MAP**
TELECOM ALIGNMENT
WILDLIFE OBSERVATIONS

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