

EXECUTIVE SUMMARY

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to analyze the potential physical environmental effects of El Paso Global Networks' (EPGN) proposal to install a network of fiber optic telecommunications cable and related facilities in California. The proposed project is analyzed at two levels in this IS/MND. The general characteristics of the proposed project and potential effects common to the project route are examined at a project-wide level. Mitigation measures for potentially significant effects are identified at both levels. Two keynotes to this approach are EPGN's commitment to avoidance of impacts through project design and adoption of constraints-driven mitigation measures as part of the proposed project.

The IS/MND concludes, given the construction approach, design elements, and mitigation built into the proposed project and the mitigation measures included herein, no significant effect on the environment will occur. In addition, no substantial evidence exists in light of the whole record that the proposed project may have a significant effect on the environment.

PROJECT DESCRIPTION

As discussed in Chapter 1 Introduction of this IS/MND, EPGN seeks to affirm its authority to install and operate a fiber optic cable system and provide facilities-based and resold 24-hour InterLATA and IntraLATA interexchange services in California. EPGN is applying to the California Public Utilities Commission (CPUC) for a Certificate of Public Convenience and Necessity (CPCN) to authorize construction of facilities within the state.

EPGN proposes to install small-diameter (less than two inches outside diameter), high-density polyethylene (HDPE) conduits carrying fiber optic cables primarily within existing, disturbed rights-of-way (i.e., roads) across California. Approximately 99 percent of the work will be conducted inside existing disturbed rights-of-way and buried through use of plowing or trenching techniques. In addition to the fiber optic cable, six regenerator/optical amplification (OP-AMP) stations will be installed along the route to boost transmission signals.

Chapter 2 Project Description contains a detailed description of several standard construction methods that will be used to install the conduit and cable along the route. EPGN has prioritized its preferred installation methods as plowing or trenching within existing road, railroad, and utility rights-of-way. Plowing requires use of a tracked vehicle with a cable reel on the front and a plow blade on the back. The plow furrows the soil and installs the cable at the same time. In some instances, the soil may be pre-ripped by a tractor in front of the plow. Trenching typically involves use of a rubber-tired backhoe or an excavator to dig a 1-foot-wide by 4-foot-deep trench. After the cable is installed in the trench, the trench is backfilled and restored. Additionally, at stream crossings or where necessary to avoid sensitive resources such as wetlands, threatened and endangered species, sensitive plant populations, and cultural or paleontological resources, rerouting, guided or directional boring, and/or bridge attachments (if permitted) will be used. Boring will also be used in some instances to cross major roads in order to minimize traffic disruptions. Geographical, topographical, and resource avoidance considerations or availability of rights-of-way will generally require using a combination of two or more of these methods along the route.

PROJECT ROUTE

The system will be located within the shoulder or paved portion of existing roadways (Table 2.2-1). The proposed system passes through Riverside, San Bernardino, and Los Angeles Counties and through lands owned by the federal government. Detailed route maps are provided in Appendix B.

OVERVIEW OF ENVIRONMENTAL COMMITMENTS

EPGN's primary approach to implementation of the proposed project is avoidance of impacts. Where total avoidance is not possible, EPGN's has committed to reducing all potentially significant impacts to less-than-significant levels by:

- ▶ Undertaking all impact avoidance measures described in Chapter 2 Project Description, Chapter 3 Approach to Environmental Assessment and Chapter 4 Environmental Setting, Impacts and Mitigation Measures within this IS/MND
- ▶ Implementing various plans (e.g., storm water pollution prevention, traffic control), where necessary
- ▶ Incorporating input from regulatory agencies, biologists, archeologists, and other qualified technical specialists and concerned stakeholders (e.g., members of the Native American community) to site conduit/cable and OP-AMP facilities
- ▶ Committing to either rerouting the conduit and cable around sensitive resources, boring the conduit under sensitive resources, or attaching it to existing bridges, where practicable
- ▶ Staking and flagging resources in the field and locating sensitive resources on construction drawings before construction
- ▶ Conducting an environmental training and awareness program for construction personnel
- ▶ Monitoring construction to ensure compliance with the terms and conditions of the environmental approvals
- ▶ Adopting and implementing all the mitigation measures identified in this IS/MND

Potential impacts and mitigation measures are discussed in detail in Chapter 4 Environmental Setting, Impacts, and Mitigation Measures and summarized in Executive Summary Table ES-1. Some of the environmental commitments described in this IS/MND include development and implementation of the following project-specific plans: mitigation monitoring plan, storm water pollution prevention plan (including erosion control and spill prevention countermeasures). These plans are included as appendices to this document.

GROWTH-INDUCING IMPACTS

The proposed project would serve the expanding telecommunications market in California, nationally and internationally. The contribution of this project to California's projected population growth would be negligible because it is not a primary factor in selecting whether to move to California and because much of the growth is independent of the availability of fiber optic capacity.

California is growing at a rapid pace, with annual population increases projected to average approximately 1.6 percent over the next 10 years. At least half of the projected population increase would be from births to existing residents (California Department of Finance 1998). Potential residents consider a variety of factors when deciding to move to California, including job availability, salaries, relative housing costs, quality of schools, commuting distance, and recreational opportunities.

CUMULATIVE IMPACTS

The overall impacts of the proposed project would be negligible or less than significant with properly planned and implemented mitigation. As discussed in Chapter 4 Environmental Setting, Impacts, and Mitigation Measures for each environmental issue area, through compliance with standards established for environmental protection and implementation of project elements and mitigation measures designed to primarily avoid or reduce impacts below the level of significance, the proposed project would not make a cumulatively considerable contribution to any significant cumulative impact. No cumulative impacts are expected to result from construction and operation of the proposed project. Cumulative impacts refer to two or more individual impacts that when considered together, are considerable or that compound or increase other environmental impacts. When considering the potential for cumulative effects, the focus is on related past, present, and probable future projects that occur within the same geographic impact zone as the proposed project. Projects outside of this zone would not contribute to a cumulative effect. For the proposed project, the geographic impact zone is very limited. The ancillary facilities, such as OP-AMP stations, are located on small parcels of land and have been evaluated for compatibility with existing and future land uses. The proposed EPGN system will be located within other existing transportation corridors, primarily within the cleared shoulder of roadways. The impact zone is restricted to the limited disturbed ROW and OP-AMP sites, or immediately adjacent to the disturbed areas. Impacts would be short-term in duration, occurring during construction and restoration activities. No long-term impacts are anticipated. To compound or increase environmental impacts, other projects would need to occur along the same existing roadways, or immediately within the ROWs vicinity, within the same construction time period. At this time, no other past, present, or future projects are known to be within the same geographic impact zone as the proposed project.

If future projects are proposed along the same transportation corridors then the applicant will coordinate construction schedules as necessary with the California Department of Transportation, or the applicable County or City Public Works Departments with permitting authority, to avoid any cumulative effects.

Table ES-1 Impacts and Mitigation Measures

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
AESTHETICS						
AE-1	Landscaping in the utility ROW may be impacted by trenching or plowing.	AE-1	<ul style="list-style-type: none"> EPGN shall consult with local agencies and landowners on proper restoration of landscaping. 	On-ROW, service boxes	Aesthetic impacts are reduced to less-than-significant level and landscaping restored to original form.	Before and during construction
AE-2	Due to the historic landscape of the townsite of Rice, the new power line and regeneration station could degrade the historic character of the landscape.	AE-2a	<ul style="list-style-type: none"> The building's exterior surface is being designed to blend in with the stark desert landscape. 	Rice Regeneration Station	Aesthetic impacts to the historic landscape are reduced to less-than-significant level.	Before and during construction
		AE-2b	<ul style="list-style-type: none"> EPGN proposes to construct the power line with wooden poles and cross-arms that are visually similar to power lines that were present during the period of historical significance, World War II. The pole line proposed will suspend two lines, a hot line and a ground line. Some design changes may be required to provide for raptor protection from electrocution. Presently, the design calls for vertically separating the two lines. 	Vicinity of Rice Regeneration Station	Wooden poles are visually similar to those of that time period and do not contrast with the historic landscape.	Before and during construction
AIR QUALITY						
AQ-1	Heavy equipment will produce temporarily increased levels of air pollutants which may contribute to exceedances of established limits and violations of air quality standards.	AQ-1	<ul style="list-style-type: none"> Work crews to use low-emission construction equipment. Apply water to disturbed areas as necessary to reduce suspension of dust particles. Reestablish ground cover on construction sites through seeding. Maintain truck and equipment engines in good working order. Clean equipment as needed to prevent tracking of soil onto adjacent roads. Clean soil from adjacent roads as needed. Suspend grading activities when wind gusts exceed 25 mph. 	All sites on and off ROW	Air quality standards for area are met.	Before, during, and after construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
AQ-2	Diesel engines for emergency backup generators will emit air pollutants during the infrequent periods they are used.	AQ-2	<ul style="list-style-type: none"> Authority to construct and operate backup diesel generators by applicable permitting agencies will ensure that proper air standards are met. 	All off-ROW sites	Fugitive dust emissions are contained. Air quality standards for area are met.	Before construction and during operation of any emergency backup generators
AQ-3	Fugitive dust emissions during grading and site preparation activities would contribute to the existing air quality impacts.	AQ-1	See mitigation AQ-1 for details	All off-ROW sites	No visible dust emissions. Air quality standards for area are met.	Before and during construction
BIOLOGICAL RESOURCES						
BIO-1	Construction associated with the project could cause damage to or permanent loss of federally or state listed plant species.	BIO-1a	<ul style="list-style-type: none"> Complete pre-construction floristic surveys to identify special-status plant populations (see Table 4-3) in and adjacent to the project route. Exclusion zones shall be established around identified special-status plant populations. Installation shall be re-routed around the exclusion zone by lateral shifting or boring beneath the exclusion zone to install the conduits. All stakes and flagging demarcating exclusion zones shall be removed within 60 days after construction and site restoration have been completed in the area. 	On-ROW and off-ROW facilities in sensitive areas	Successful monitoring. Project will not cause significant impact on sensitive biological resources.	Before, during, and after construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
		BIO-1b	<ul style="list-style-type: none"> ▪ For CNPS list 4 plant species, floristic surveys shall be performed in the appropriate seasons. Plant populations and suitable habitat shall be identified in the construction corridor; these areas shall be staked and flagged. Construction activities shall be conducted when plants are not flowering. ▪ Ground disturbance shall be limited to the smallest possible corridor. ▪ Contact the appropriate land management and/or resource agencies after restoration activities are complete and report findings. 			
		BIO-1c	<ul style="list-style-type: none"> ▪ A biological monitor shall be present onsite during pre-construction and construction activities. 			
BIO-2	Construction activities could introduce exotic weeds.	BIO-2	<ul style="list-style-type: none"> ▪ Per permitting agency requirements, noxious weed infestation areas shall be identified before construction activities and locations shall be indicated on construction drawings. ▪ Use certified weed-free imported materials or rice straw in upland areas. ▪ Coordinate with land management agencies to ensure that the appropriate BMPs are implemented. ▪ Contact county agricultural commissions and land management agencies to develop lists of target noxious weed species for the project route and to discuss measures to avoid the dispersal of noxious weeds. ▪ Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weed infestations. ▪ Clean all equipment coming onto the project area from weed-infested areas or areas of unknown weed 	On- and off-ROW	Spread of noxious weeds will be avoided.	Before, during, and after construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>status.</p> <ul style="list-style-type: none"> ▪ Use on-site sources of fill, mulching, and seeds when available. ▪ Use certified weed-free fill, mulch, and seed. ▪ Use certified weed-free imported materials (or rice straw in upland areas). ▪ Biological monitors shall be present on-site to identify noxious weeds and provide guidance. 			
BIO-3	Construction associated with the project has potential to cause adverse impacts to special-status burrowing species and their habitats.	BIO-3a	<ul style="list-style-type: none"> ▪ EPGN shall retain qualified <u>USFWS and CDFG-approved</u> biologists (per USFWS and CDFG specifications) to identify the locations of potential burrowing owl, desert tortoise, and Mohave ground squirrel burrows, <u>and Mojave fringe-toed lizard</u>. The locations of these burrows shall be mapped. ▪ If it is determined that burrows are occupied by any of the above special-status species, the burrows shall be avoided until a qualified biologist determines that they have been vacated. ▪ Surveys shall be conducted in accordance with agency-approved survey protocols or guidelines. 	On-ROW	Sensitive special-status burrowing species are not significantly impacted.	Before, during, and after construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
		BIO-3b	<ul style="list-style-type: none"> ▪ EPGN qualified biologists shall monitor installation activities on the project in the areas where occupied burrow habitat has been identified. ▪ EPGN qualified biologists shall be responsible for staking or flagging occupied burrows, conducting on-site monitoring, documenting violations and compliance, coordination with construction personnel, and post-construction documentation. ▪ EPGN qualified biologists shall be responsible for monitoring construction activities in areas that support special-status burrowing species. They shall also be responsible for completing variance forms and obtaining clearance from the resource agencies for deviations from the mitigation measures (e.g., decreases in exclusion zones). 			
		BIO-3c	<ul style="list-style-type: none"> ▪ EPGN shall conduct a biological resource education program for construction crews before construction activities begin. The education program shall include a brief review of the special-status species and other sensitive resources that could occur in the proposed project area, locations where they may be encountered, and their legal status and protection under the California and Federal Endangered Species Acts (CESA and ESA). 			

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
		BIO-3d	<ul style="list-style-type: none"> ▪ The proposed project could potentially adversely affect the desert tortoise and other federally-listed threatened or endangered species; an interagency Section 7 consultation is required between BLM and USFWS. This process prohibits federal agencies or federal permit applicants from making irreversible or irretrievable commitment of resources once Section 7 consultation has been initiated. ▪ EPGN shall incorporate all additional permit conditions identified during the consultation process into construction specifications. ▪ EPGN and qualified biologists shall routinely inspect construction activities to verify that these permit conditions have been implemented. 			

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
		BIO-3e	<ul style="list-style-type: none"> ▪ A state-listed species could potentially be affected (e.g., Mohave ground squirrel); a permit pursuant to Section 2081 of the Fish and Game Code is required. Section 2080 of CESA prohibits “take” of any state-listed species. ▪ During the permitting process, additional measures to avoid or mitigate impact to Mohave ground squirrel may be identified. ▪ EPGN shall incorporate all additional permit conditions identified during the permitting process into construction specifications and EPGN inspectors shall verify that these conditions are implemented. ▪ Mitigation measures BIO-3a, BIO-3b, BIO-3c, and BIO-3d will reduce potential impacts to the Mohave ground squirrel. These measures are summarized as follows: ▪ Pre-construction surveys to identify and map currently occupied and active burrows; ▪ Occupied burrows will be avoided until a qualified biologist determines that they have been vacated; ▪ Biological resource education program for construction crews; ▪ Biological monitor to ensure compliance with all mitigation measures; ▪ Any additional conditions required by the California Department of Fish and Game (CDFG) and the US Fish and Wildlife Service (USFWS) will be incorporated prior to construction. 			
BIO-4	Construction associated with the project has the potential to cause adverse impacts to western spadefoot toad, California red-legged	BIO-4a	<ul style="list-style-type: none"> ▪ EPGN shall retain qualified <u>USFWS</u> and <u>CDFG-approved biologists</u> (per USFWS and CDFG specifications) to conduct a pre-construction survey for special-status amphibians and reptiles and their habitats in areas 	On-ROW	Sensitive amphibian and reptile species are not significantly impacted.	Before, during, and after construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
	frog, arroyo toad, southwestern pond turtle, silvery legless lizard, and San Diego horned lizard and/or their habitats.		<p>designated critical habitat.</p> <ul style="list-style-type: none"> ▪ During surveys, all areas of appropriate habitat shall be identified and mapped. ▪ Exclusion zones shall be installed and exclusion fencing shall be developed around these areas. ▪ If arroyo toad or the California red-legged frog are found during these surveys, the terms and conditions listed in the USFWS Biological Opinion issued for this project shall be implemented. 			
		BIO-4b	<ul style="list-style-type: none"> ▪ Before construction, qualified biologists shall stake and flag exclusion zones around all riparian and wetland areas. ▪ Most construction-related activities shall be prohibited within the exclusion zones. ▪ Foot traffic and essential vehicle operation on existing roads will be allowed. ▪ All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities shall be prohibited within the exclusion zones. ▪ Construction activities within an exclusion zone shall be accomplished by directionally boring under the zone. 			
		BIO-4c	<ul style="list-style-type: none"> ▪ In areas that represent appropriate habitat for special-status amphibians and reptiles, EPGN shall avoid disturbance to special-status reptiles and amphibians by directionally boring under streams, constructing barrier fencing, and relocating animals during construction. ▪ Barrier fencing shall be constructed along each side of the work area to prohibit animals from re-entering the 			

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>work area during system installation activities.</p> <ul style="list-style-type: none"> ▪ Once the system is installed, the site shall be immediately restored to its original scope and conditions, and the barrier fencing shall be removed. ▪ EPGN qualified biologists shall be on site to identify and relocate any animal that moves into the work area during construction activities. ▪ Where other access is unavailable, vehicles may need to cross drainages that could potentially support special-status amphibians and reptiles. ▪ If an alternate crossing is not available, barrier fencing shall be installed and animals shall be relocated. ▪ Barrier fencing shall be constructed of wire mesh material so that flows are not impeded but access into the disturbance area by amphibians and reptiles is restricted. ▪ If barrier fencing is required, it shall be installed four days prior to use of the crossing site. ▪ Relocation surveys shall be conducted for three consecutive days to verify that all animals are removed from the disturbance area. ▪ Temporary barriers shall be removed immediately after the installation activities are completed, the crossing is no longer needed, and the site is restored. 			

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
		BIO-4d	<ul style="list-style-type: none"> ▪ Because the proposed project could potentially result in adverse impacts to California red-legged frog, consultation under Section 7 of the ESA between BLM and USFWS is required. ▪ Refer to Mitigation BIO-3d for a detailed description of this permitting process and EPGN's commitment to implementing avoidance, protection, and mitigation measures identified and agreed upon during this process. 			
		BIO-4e	<ul style="list-style-type: none"> ▪ A biological monitor shall be present onsite during pre-construction and construction activities. 			
		BIO-4f	<ul style="list-style-type: none"> ▪ Consultation with USFWS for potential effects to arroyo toad Critical Habitat. 			
BIO-5	Construction associated with the project may cause adverse impacts to special-status non-riparian nesting bird species or otherwise protected raptors.	BIO-5a	<ul style="list-style-type: none"> ▪ If construction activities are scheduled to occur during the breeding season, pre-construction surveys of all identified active nest sites within the area immediately adjacent to the construction ROW shall be conducted. ▪ If construction activities are scheduled to occur during the non-nesting season, then no surveys are required. ▪ If surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. ▪ To avoid potential adverse effects on nesting raptors, no-disturbance buffers shall be established around active nests during the breeding season. ▪ If active nests are found, buffers must be established around the active nest for prairie falcon, and Bendire's thrasher. 	On-ROW	Potential adverse affects on non-riparian nesting bird species or otherwise protected raptors are avoided.	Before and during construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<ul style="list-style-type: none"> ▪ Evaluations and buffer adjustments shall be completed in consultation with USFWS and CDFG representatives and approved in writing by these agencies. ▪ The portion of the project ROW that is within the designated buffer shall be identified in the field by staking and flagging. ▪ If construction activities occur only during the non-breeding season between August 31 and February 1, no surveys need to be conducted and no buffers would be established. 			
		BIO-5b	<ul style="list-style-type: none"> ▪ Because the proposed project could potentially affect gilded flicker, a state listed species, a permit pursuant to Section 2081 of the Fish and Game Code may be required. ▪ During this permitting process additional measures to avoid or mitigate impact to these species may be identified. ▪ EPCN shall incorporate all additional permit conditions identified during the permitting process into construction specifications and the contract compliance inspector shall verify that these conditions are implemented. ▪ <u>Mitigation measures BIO-5a and BIO-5c will reduce potential impacts to the gilded flicker. These measures are summarized below:</u> ▪ <u>Pre-construction surveys to determine the locations of currently occupied and active nests during the nesting season;</u> ▪ <u>Establishment of buffer areas around active nests;</u> ▪ <u>Biological monitor to ensure compliance with all mitigation measures;</u> ▪ <u>Any additional conditions required by</u> 			

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			the CDFG and the USFWS will be incorporated prior to construction.			
		BIO-5c	<ul style="list-style-type: none"> A biological monitor shall be present onsite during pre-construction and construction activities. 			
		BIO-5d	<ul style="list-style-type: none"> Consultation with USFWS for potential effects to coastal California gnatcatcher Critical Habitat. 			
BIO-6	Construction associated with the project could result in the disturbance of special-status bats.	BIO-6	<ul style="list-style-type: none"> A biological monitor shall be present onsite during pre-construction and construction activities. In conjunction with mitigation for nesting swallows (see Mitigation BIO-10) and before construction, a wildlife biologist shall conduct a survey of all bridge attachment sites to determine if bats are present. If no bat roosts are found, no further mitigation would be required. If bat roosts are found, the location shall be mapped and included as part of the Sensitive Resource Education Program. Attachment of the system to these bridges would result in a temporary, short-term disturbance to active bat roosts. <u>If bats are determined to be actively using a roost on a bridge attachment site, no work will be conducted until the bats have left, as determined by a qualified and CDFG-approved biologist.</u> Attachment to these bridges shall be conducted at night when the bats are foraging. EPCN shall retain a qualified biologist (per CDFG specifications) to monitor attachment to these bridges. EPCN shall contact CDFG to determine if any additional measures would be required to avoid or reduce 	On-ROW	Potential adverse affects to special-status bats.	Before and during construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			adverse impacts to these species.			
BIO-7	Construction associated with the project could cause damage to or permanent loss of riparian communities.	BIO-7	<ul style="list-style-type: none"> ▪ Construction equipment shall be confined to construction ROW and designated work sites in areas that support sensitive resources. ▪ Construction personnel shall be informed about the importance of ground-disturbing activities outside the designated work area. 	On-ROW	Potential adverse effects to riparian communities.	Before and during construction
BIO-8	Construction associated with the project may adversely impact waters of the U.S.	BIO-8	<ul style="list-style-type: none"> ▪ When possible, directional boring shall be used to place the fiber optic line under Waters of the U.S., including wetlands. Boring locations shall be determined through consultation with the resource agencies and the onsite biological monitor. ▪ In wetland areas, construction activities shall be limited to the ROW. ▪ Protective barrier fencing or staking and flagging shall be used in specified areas to protect waters of the U.S. near the work zone. ▪ Wetlands shall also be identified on the construction drawings or resource mitigation drawings. ▪ EPGN biologists shall assist in placing stakes and flagging or protective barriers around waters prior to any ground-disturbing activities. ▪ EPGN shall identify the specific location of protective barriers before construction activities are initiated near specified jurisdictional wetlands. ▪ Exposed slopes and streambanks shall be stabilized immediately after completion of installation activities. ▪ Restoration shall be made in a manner that encourages vegetation to re-establish to its pre-project condition and reduces the effects of 	On-ROW	Significant impacts to waters of the U.S.	During and after construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>erosion on the drainage system.</p> <ul style="list-style-type: none"> ▪ In highly erodible stream systems, geotextile mats, excelsior blankets, or other soil stabilization products approved by the agencies shall be used. ▪ In riparian or wetland areas, no rice straw shall be used to stabilize erodible soils. ▪ Trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high-water mark of drainages shall be removed in a manner that reduces disturbance of the drainage bed and bank to a less-than-significant level. ▪ Implement additional measures that may be required as part of the CDFG, ACOE, and RWQCB permits that shall be obtained for the project route. ▪ Installation activities in saturated or ponded wetlands shall be avoided. ▪ The ground surface shall be re-contoured to maintain pre-project wetland hydrology. 			
BIO-9	Construction associated with the project may cause adverse impacts to special-status riparian-nesting bird species.	BIO-9a	<ul style="list-style-type: none"> ▪ Pre-construction surveys shall be conducted to determine the presence or absence of nesting migratory birds prior to initiation of construction activities at the project site. ▪ If nesting migratory birds are located during the survey, construction shall be postponed until the nestlings have fledged. ▪ To protect migratory birds, no woody riparian vegetation removal shall be conducted between March 15 and September 15 for those identified nesting areas. ▪ Vegetation shall be cut at least 1 foot above ground level to leave the root systems intact and allow for 	On-ROW	Potential adverse affects on special-status riparian-nesting bird species are avoided.	Before and during construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>more rapid regeneration of the plants.</p> <ul style="list-style-type: none"> ▪ Cutting shall be limited to the minimum area necessary within the 25 foot-wide ROW. ▪ Erosion control procedures shall be followed in all cases where there is the potential to impact riparian habitat. 			
		BIO-9b	<ul style="list-style-type: none"> ▪ Although it is not anticipated that the proposed project would result in adverse impacts to the federally-listed least Bell's vireo, additional measures to mitigate potential impacts to these species may be identified during this consultation process. ▪ Because the proposed project may adversely affect western yellow-billed cuckoo, elf owl, and gila woodpecker, state-listed species, a permit pursuant to Section 2081 of the Fish and Game Code will be required. ▪ During this permitting process additional measures to avoid or mitigate impacts to these species may be identified. ▪ Yuma clapper rail and least Bell's vireo are both state and federally-listed species. CDFG could defer to USFWS for these species or cover them under the Section 2081 permitting process. ▪ EPCN shall incorporate all additional permit conditions identified during the permitting process into construction specifications, and the contract compliance inspector shall verify that these conditions are implemented. ▪ <u>Mitigation measures BIO-9a and BIO-9c will reduce potential impacts to the western yellow-billed cuckoo,</u> 			

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>elf owl, and Gila woodpecker. These measures are summarized below:</p> <ul style="list-style-type: none"> ▪ <u>Pre-construction surveys to determine the locations of currently occupied and active nests;</u> ▪ <u>Postpone construction until after young have fledged;</u> ▪ <u>No removal of woody vegetation during the breeding season;</u> ▪ <u>Measures to prevent impacts to riparian habitat in BIO-7;</u> ▪ <u>Biological monitor to ensure compliance with all mitigation measures;</u> ▪ <u>Any additional conditions required by the CDFG and the USFWS will be incorporated prior to construction.</u> 			
		BIO-9c	<ul style="list-style-type: none"> ▪ A biological monitor shall be present onsite during pre-construction and construction activities. 			
BIO-10	Construction associated with the project may result in damage to or loss of swallow nests.	BIO-10	<ul style="list-style-type: none"> ▪ A biological monitor shall be present onsite during pre-construction and construction activities. ▪ A wildlife biologist shall inspect known nest sites during the swallows' non-breeding season between September 1 and February 28. ▪ If all swallow nests are abandoned, <u>as determined by a qualified and CDFG-approved biologist</u>, the nests shall be removed. ▪ <u>Bridge attachments with actively nesting cliff swallows will be avoided between March 1 and September 1.</u> ▪ If the proposed bridge attachments would occur during the swallows' breeding season, the nests shall be removed before March 1. ▪ If swallows begin building nests on the bridge after March 1, the mud placed by the swallows shall be 	On-ROW	Potential adverse affects to swallow nests.	Before and during construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>removed weekly either by manually knocking them down or by high pressure water.</p> <ul style="list-style-type: none"> ▪ If a swallow completes a nest during bridge attachments, EPGN shall contact USFWS to obtain the appropriate permits for removal. ▪ The mud shall be removed weekly from March 1 until September 1 or until the bridge attachments are completed, whichever comes first. 			
BIO-11	Construction associated with the project near waterways could cause discharge of sediment into waterways.	BIO-11	<ul style="list-style-type: none"> ▪ EPGN will not trench in wetted channels. ▪ The conduits shall be attached to bridges at the Colorado, Mojave, and Santa Clara River crossings. ▪ Ground disturbance near waterways shall be limited to the construction ROW. ▪ The potential for accidental bentonite seeps through frac-outs will be reduced to a less-than-significant level through the measures specified in the project description - Installation of Conduit. ▪ A biological monitor shall be present onsite during pre-construction and construction activities. ▪ Spills of hazardous materials shall be reduced to a less-than-significant level through implementation of measures specified in the SPCC. 	On-ROW	Sediment discharge to waterways is avoided.	Before and during construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
BIO-12	An accidental release of hazardous materials from construction equipment could impact resources.	BIO-12	<ul style="list-style-type: none"> ▪ As described in the SPCC, hazardous substances shall be stored in staging areas located at least 150 feet from streams and other surface waters. ▪ Refueling and vehicle maintenance shall be performed at least 150 feet from these receiving waters. ▪ Sedimentation fences, certified weed-free hay bales, sand bags, water bars, and baffles shall be used as additional sources of protection for waters, ditches, and wetlands. 	On-ROW	No accidental spill will occur.	During construction
BIO-13	Directional boring or waterways for telecommunication system installation, if improperly done, could result in frac-outs that release harmful bentonite into local waterways.	BIO-13	<ul style="list-style-type: none"> ▪ Boring crews shall be required to strictly monitor drilling fluid preserves; retain containment equipment on site; monitor waters downstream of the crossing sites to quickly identify any seep, and immediately stop work if a seep into a stream is detected; immediately implement containment measures; adhere to agency reporting requirements, and identify responsible parties. ▪ Containment equipment shall include staked and floating silt barriers to isolate frac-out locations from flowing water. 	On-ROW near drainage crossings	Significant impacts to waters of the U.S. will be avoided.	Before and during construction
BIO-14	Construction associated with the project may affect species protected by the County of San Bernardino Desert Native Plant Protection Ordinance.	BIO-14	<ul style="list-style-type: none"> ▪ Re-route corridor or directionally bore to avoid impacting smoketrees, mesquites, creosote bush rings, <i>Agavaceae</i> species plants, and Joshua trees, or acquire appropriate permits for tree removal from San Bernardino County. ▪ A biological monitor shall be present onsite during pre-construction and construction activities. 	On-and off-ROW	Minimize disturbance to desert native plants	Before, during, and after construction
CULTURAL RESOURCES						
CR-1	There are seven historic buildings that were previously listed or have been determined	CR-1	EPGN shall: <ul style="list-style-type: none"> ▪ Submit all survey reports and site records to the appropriate California Historical Resources Information 	On-ROW	No significant impact to cultural resources.	Before and during construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
	<p>potentially eligible for the National Register of Historic Places (NRHP). These buildings are not within the ROW and will not be impacted by construction activities.</p>		<p>System (CHRIS) clearinghouses as required.</p> <ul style="list-style-type: none"> ▪ A programmatic Agreement is in the process of being drafted between the BLM, the National Park Service, the ACOE, the Bureau of Indian Affairs, The California, Arizona, New Mexico and Texas SHPOs, the Gila River Indian Community, and EPGN for BL 31, 22, 23, 32a, 35, 39, 41, 43a, and 43b. ▪ Coordinate with the California SHPO, CPUC, Native Americans, local agencies, and jurisdictions on all impacts to historic buildings through project design. ▪ Reduce construction-related short-term impacts to a less-than-significant level by shortening construction time and avoiding weekends and holidays. ▪ Avoid all known eligible historic and prehistoric archaeological sites. ▪ Conduct archaeological monitoring with qualified archaeologist as determined in consultation with CPUC. ▪ If previously unidentified cultural resources are found, stop work stop until a qualified archaeologist can make appropriate recommendations. ▪ Conduct appropriate consultations with state and federal land management agencies. ▪ On federal lands, treat unavoidable sites in accordance with mitigation measures set forth in the El Paso Environmental Assessment submitted to the BLM. ▪ Conduct worker educational training. ▪ Utilize Native American monitors during construction if warranted. If human remains are encountered, EPGN shall contact the county 			

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>coroner and the Native American Heritage commission within 24 hours of the find.</p> <ul style="list-style-type: none"> If known fossiliferous deposits are present, a qualified paleontologist shall monitor during construction grading and excavation. 			
CR-2	Potential for significant cultural remains.	CR-2	<ul style="list-style-type: none"> EPGN is committed to installing the system within Midland Road in the area adjacent to the townsite. Therefore, no direct impacts will occur. The region location contains no significant features or deposits. 	Rice Townsite	No significant impact on cultural resources.	Before and during construction
CR-3	Unidentified cultural resources encountered during construction	CR-3	<ul style="list-style-type: none"> If find is significant, resource shall be avoided. If avoidance is not possible, a meeting with CPUC and other agency personnel shall be held to discuss data recovery and/or other measures as possible mitigation. 	All off-ROW sites	No significant impact to cultural resources.	Before and during construction
CR-4	Potential for known fossiliferous deposits	CR-4	<ul style="list-style-type: none"> At the request of agencies, if paleontological resources are discovered during construction, work shall stop until the paleontologist can review the discovery and recommend appropriate mitigation such as onsite analysis and/or recovery of the find, leading to subsequent analysis and reporting on the discovery. 	All off-ROW sites	No significant impact on paleontological resources.	Before and during construction
CR-5	Potential for the discovery of human remains.	CR-5	<ul style="list-style-type: none"> If human remains are discovered, all work in the immediate area shall stop and the County Coroner and Native American Heritage Commission must be contacted within 24 hours of the find. The steps outlined in CEQA section 15064.5(e) must be followed. On federal lands, the steps outlined in the Native American Graves Protection and Repatriation Act must be followed. 	All off-ROW sites	Minimal disturbance of discovered human remains.	During construction
GEOLOGY AND SOILS						

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
G&S-1	Potential erosion due to excavation, grading, and filling.	G&S-1	<ul style="list-style-type: none"> EPGN shall comply with all local design, construction, and safety standards through the permit process. Erosion control plans shall be prepared for areas identified to be susceptible to erosion. 	On-ROW	Erosion at the project areas is contained.	Before and during construction
G&S-2	In a few areas where installation will require excavation into steep slopes, willow mass movement (i.e., landslides) could occur.	G&S-2	<ul style="list-style-type: none"> Areas of existing and potential instability shall be avoided to the extent possible. Geotechnical analysis shall be conducted in areas where the proposed route must pass through a potentially unstable area. 	On-ROW	No landslides are recorded and the conduits remain undamaged.	Before construction
G&S-3	Seismically-induced liquefaction could occur if soils are not compacted properly.	G&S-3	<ul style="list-style-type: none"> The construction of the building pads must conform to the Uniform Building Code Seismic Zone Criteria. As required, a state-certified Engineer must certify the design, placement, and compaction of soil for the building pads. Engineered placement of fill material will mitigate impacts associated with seismic liquefaction of soil. Geophysical testing of soils at the building pad sites shall be conducted to determine the geophysical properties of the soils and the building pads designed accordingly. 	All off-ROW facilities	Successful construction of building pads with little or no subsidence.	Before construction
G&S-4	Erosion impacts exist due to runoff and wind erosion.	G&S-4	<ul style="list-style-type: none"> Implement the Storm Water Pollution Prevention Plan (SWPPP) and BMPs to collect or redirect stormwater runoff around the proposed project sites. 	Off-ROW	No pooling or standing water at the subject site following a storm event.	Before, during, and after construction
HAZARDS AND HAZARDOUS MATERIALS						
HAZ-1	Potential release of hazardous materials which may result in injury to workers.	HAZ-1	<ul style="list-style-type: none"> The construction contractor shall ensure proper labeling, storage, handling, and use of hazardous materials in accordance with best management practices and OSHA's HAZWOPER requirements. The construction contractor shall ensure that employees are properly 	On-ROW	Proper handling procedures and BMPs prevent the spill of hazardous materials to the surrounding area. Hazardous materials encountered are properly managed.	During construction

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
			<p>trained in the use and handling of these materials and that each material is accompanied by a material safety data sheet.</p> <ul style="list-style-type: none"> ▪ A spill kit shall be present at each construction site. ▪ Any small quantities of hazardous materials stored temporarily in staging areas shall be stored on pallets within fenced and secured areas and protected from exposure to weather. ▪ Incompatible materials shall be stored separately as appropriate. ▪ To avoid unexpected releases of hazardous materials, the construction contractor team shall include individuals trained in accordance with OSHA's HAZWOPER requirements. ▪ The construction team shall have a written plan outlining how to respond if hazardous materials are unexpectedly encountered. ▪ All hazardous waste materials removed during construction shall be handled and disposed of by a licensed waste disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal and or recycling facility. ▪ EPGN shall require in its contracts that contractors meet federal, state, and local requirements. 			
HAZ-2	Long-term storage of hazardous materials may result in accidental spills/releases.	HAZ-2	<ul style="list-style-type: none"> ▪ A SWPPP must be prepared specific to each proposed regeneration station and strictly followed. ▪ A Spill Prevention, Containment, and Control Plan (SPCC) must be prepared for the proposed regeneration station, and strictly followed. 	All off-ROW facilities	No release of hazardous materials to the surrounding environment.	During construction
HYDROLOGY AND WATER QUALITY						

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
HY-1	During boring operation, bentonite could seep to the surface within a stream channel.	HY-1	<ul style="list-style-type: none"> EPGN shall attach conduits from existing bridges, whenever feasible at crossings. The potential for accidental bentonite seeps through frac-outs shall be reduced to a less-than-significant level by measures specified in section 2. 	On-ROW	Successful monitoring and environmental education. No significant impact on sensitive biological resources.	Before and during construction
HY-2	Stormwater runoff may adversely impact quality of receiving waters.	HY-2	<ul style="list-style-type: none"> EPGN's SWPPP and associated BMPs must be employed to prevent erosion and contain sediments on site and during construction. 	All off-ROW facilities	Stormwater runoff will be successfully prevented from transport into waterbodies.	During construction
HY-3	Contamination of aquifer and nearby wells may occur due to refueling of vehicles and storage of toxic fluids near surface waters.	HY-3	<ul style="list-style-type: none"> Implement EPGN's SPCC Plan. 	All off-ROW facilities	Hazardous materials will be successfully prevented from transport into aquifers and wells.	During construction
NOISE						
NO-1	Construction noise may substantially increase noise above background sound levels.	NO-1	<ul style="list-style-type: none"> All equipment shall have sound-control devices no less effective than those provided on original equipment. No equipment shall have an unmuffled exhaust. Additional noise control measures must be installed to reduce increases in ambient noise concentrations to sensitive receptors around the sites. 	On-ROW	Noise from construction is kept to levels that do not exceed local standards.	Before and during construction
NO-2	Backup generators will exceed allowable noise levels.	NO-2	<ul style="list-style-type: none"> Install additional noise measures to reduce ambient noise concentrations to sensitive receptors around the sites. 	Off-ROW	Sites will have allowable ambient noise concentrations.	Before construction
NO-3	Sensitive receptors are located within 350 feet of the proposed regeneration stations.	NO-3	<ul style="list-style-type: none"> Install additional noise measures to reduce ambient noise concentrations to sensitive receptors around the sites. 	Off-ROW	Sites will have allowable ambient noise concentrations.	Before construction
RECREATION						

Table ES-1 Impacts and Mitigation Measures (continued)

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing
REC-1	An increase in off-road vehicling and illegal camping on public lands may occur by the construction work force.	REC-1	<ul style="list-style-type: none"> ▪ EPGN shall instruct contractor to limit vehicle traffic to the construction ROW and prohibit off-road vehicling on public lands and camping, except in authorized areas. 	On-ROW	Limit disturbance to public lands.	During construction
TRANSPORTATION/TRAFFIC						
TR-1	Increase in traffic that is substantial in relation to existing traffic load.	TR-1	<ul style="list-style-type: none"> ▪ EPGN shall coordinate with county public works departments and CalTrans to minimize ROW encroachments. ▪ All local safety and construction standards shall be met through the local permit process. ▪ Advance notice of construction date and time shall be given two weeks prior to surrounding area. ▪ Local agencies shall be consulted on appropriate restoration of impacted public service facilities in ROW. ▪ EPGN shall submit As-Built Plans to CalTrans and county public works departments for areas where the proposed route encroaches on CalTrans ROWs. ▪ Traffic control measures, such as the placement of warning signs and the use of traffic control personnel when appropriate, shall be implemented. ▪ A traffic control plan detailing lane closures, scheduling, signing and flagging procedures, safety protocol, etc., shall be implemented. 	On-ROW	Reduce traffic delays and impacts to a less-than-significant level.	During construction