

**U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PALM SPRINGS-SOUTH COAST FIELD OFFICE**

**ENVIRONMENTAL ASSESSMENT
DOI-BLM-CA-060-0009-0045-EA**

**PUBLIC SAFETY ENTERPRISE COMMUNICATION (PSEC) PROJECT
RIVERSIDE COUNTY, CALIFORNIA**

**Bureau of Land Management
Palm Springs-South Coast Field Office
1201 Bird Center Drive
Palm Springs, CA 92262**

**U.S. DEPARTMENT OF THE INTERIOR
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**FINDING OF NO SIGNIFICANT IMPACT
DOI-BLM-CA-060-0009-0045-EA**

NAME of PROJECT: Public Safety Enterprise Communication (PSEC) Project

FINDING OF NO SIGNIFICANT IMPACT: Environmental impacts associated with the proposed action have been assessed. Based on the analysis provided in the attached EA, I conclude the approved action is not a major federal action and will result in no significant impacts to the environment under the criteria in Title 40 Code of Federal Regulations 1508.18 and 1508.27. Preparation of an Environmental Impact Statement to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969.

Field Manager
Palm Springs-South Coast Field Office
USDI Bureau of Land Management
1201 Bird Center Drive
Palm Springs, CA 92262

Date

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**ENVIRONMENTAL ASSESSMENT
DOI-BLM-CA-0009-0045-EA**

DATE: September 18, 2009

TITLE/PROJECT TYPE: Public Safety Enterprise Communication (PSEC) Project

BLM OFFICE: Palm Springs-South Coast Field Office
1201 Bird Center Drive
Palm Springs, CA 92262

APPLICANT/PROPONENT: County of Riverside

LOCATION OF PROPOSED ACTION:

This Environmental Assessment (EA) assesses proposed actions at the following Public Safety Enterprise Communication (PSEC) sites located on Bureau of Land Management (BLM) lands:

Chuckwalla Communication Site

Riverside County, California, Township 6 South, Range 15 East, Section 7 (Projected). The site is located within an existing Riverside County communication facility, situated in an extensive communication complex. The site is found atop a peak in the Chuckwalla Mountains, approximately five miles southwest of Desert Center.

Corn Springs Communication Site

Riverside County, California, Township 6 South, Range 17 East, Section 6. The site is found adjacent to an existing communications tower, approximately 0.25 mile south of Interstate 10 (I-10) and nine miles east of Desert Center.

Road 177 Communication Site

Riverside County, California, Township 3 South, Range 16 East, Section 25. The site is located adjacent to an existing communications tower 400 feet west of State Route 177 (SR-177) and 15 miles north of Desert Center.

Vidal Junction Communication Site

San Bernardino County, California, Township 1 North, Range 24 East, Section 8. Located adjacent to an existing communications facility 250 feet south of SR-62 and five miles east of Vidal Junction.

Whitewater Communication Site

Riverside County, California, Township 3 South, Range 3 East, Section 12. The site is within an existing Riverside County communication facility and amongst a number of wind turbines atop Whitewater Hill one mile northeast of the I-10 and SR-62 junction.

Wileys Well Communication Site

Riverside County, California, Township 6 South, Range 20 East, Section 33. Located adjacent to an existing communications facility immediately west of Wiley Well Road, 0.25 mile south of the I-10 and Wiley Well Road interchange and 18 miles west of Blythe.

PROJECT ACREAGE

BLM	<u>0.23 acre each (permanent)</u>
	<u>0.23 acre each (temporary)</u>
Other Federal	_____
State	_____
Private	_____
Other (specify)	_____

USGS TOPOGRAPHIC MAPS

Chuckwalla Communication Site: Desert Center; Corn Springs Communication Site: Sidewinder Well; Road 177 Communication Site: Coxcomb Mountains; Vidal Junction Communication Site: Parker NW; Whitewater Communication Site: Desert Hot Springs; and Wileys Well Communication Site: Hopkins Well. All referenced maps are 7.5-minute USGS topographic maps.

LAND USE PLAN CONFORMANCE

In accordance with Title 43 Code of Federal Regulations 1610.5-3, the proposed action and alternatives are in conformance with the following approved land use plan: California Desert Conservation Area (CDCA) Plan (1980), as amended. Specific plan amendments and land use designations for each site are noted below.

Chuckwalla Communication Site

Northern and Eastern Colorado Desert (NECO) Amendment to the CDCA Plan. The proposed site is located on lands designated as Multiple-Use Class L. The Chuckwalla Mountain Communication Site Plan has been adopted for this area.

Corn Springs Communication Site

NECO Amendment to the CDCA Plan. The proposed site is located on lands designated as Multiple-Use Class L. No communication site plans have been adopted for this area.

Road 177 Communication Site

NECO Amendment to the CDCA Plan. The proposed site is located on lands designated as Multiple-Use Class L. No communication site plans have been adopted for this area.

Vidal Junction Communication Site

NECO Amendment to the CDCA Plan. The proposed site is located on lands designated as Multiple-Use Class L. No communication site plans have been adopted for this area.

Whitewater Communication Site

Coachella Valley Amendment (CVA) to the CDCA Plan. The proposed site is located on lands designated as Multiple-Use Class M. No communication site plans have been adopted for this area.

Wileys Well Communication Site

NECO Amendment to the CDCA Plan. The proposed site is located on lands designated as Multiple-Use Class L. No communication site plans have been adopted for this area.

PUBLIC COMMENT PERIOD

The CDCA Plan specifies that if a communication network involves three or more communication sites, then a 30-day public comment period must be initiated for any EA that is prepared. Accordingly, this EA will be circulated for 30 days following posting on the BLM Palm Springs-South Coast website and through notice to the local media.

REGULATORY COMPLIANCE

The proposed action has been assessed in accordance with applicable regulations and guidelines associated with the following issues:

Biological Resources

A Biological Resources Assessment for each of the project sites was prepared by Michael Brandman Associates (MBA) (Appendix B). The purpose of the assessment was to determine the affected environment at each site and to identify expected effects to biological resources, especially those related to sensitive resources. The assessment also identified additional steps that may be required to preserve and/or avoid sensitive biological resources.

Each site was assessed for sensitive resources as listed in applicable federal, state, and local policies and plans, including the NECO and CVA plans, as well as the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). In addition to these informational resources, the California Natural Diversity Database (CNDDDB) was also consulted to determine if additional sensitive resources not listed in any of the above inventories have the potential to occur at any of the project sites. Where required, focused surveys for desert tortoise were conducted following established U.S. Fish and Wildlife Service (USFWS) protocols. Additional information regarding the assessment and the identified effects of the project on biological resources can be found in Sections 4.0 and 5.0 of this EA, and also within the Biological Resources Assessment located in Appendix B.

Fish and Wildlife Consultation:

The proposed project falls within the definition of actions covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17) and the Biological Opinion for the California Desert Conservation Area Plan [Desert Tortoise] (6840 CA930(P)) (1-8-04-F-43R). Both of these biological opinions analyzed the potential impacts to the desert tortoise and its designated critical habitat on BLM lands from minor construction projects (defined as projects impacting less than two acres). These biological opinions specifically covered the construction of communication facilities, such as those proposed in this EA. The terms and conditions of the Small Projects BO, as well as the desert tortoise mitigation measures from Appendix D of the Northern and Eastern Colorado Desert Coordinated Plan, have been incorporated into the mitigation measures found in Section 7.0 of this EA.

Cultural Resources

A Cultural Resources Assessment for each of the project sites was prepared by MBA at the request of the Riverside County Department of Facilities Management (Appendix C). The purpose of the assessment was to identify whether any cultural resources, including Historic Properties, would be affected by the proposed action. The report was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969; the National Historic Preservation Act (NHPA) of 1966, Section 106, as amended; Section 106 of the NHPA, as implemented at 36 Code of Federal Regulations (CFR) 800 and the BLM 8110 Manual Series, Identifying and Evaluating Cultural Resources. The report also reflected project specific requirements contained within the BLM Fieldwork Authorization. Additional information regarding the assessment and the identified effects of the proposed action on cultural resources can be found in Sections 4.0 and 5.0 of this EA.

Potential effects to resources of traditional cultural value were explored through information scoping efforts with numerous Native American Tribal groups and individuals. For each project site, a Sacred Lands File Search was conducted by the Native American Heritage Commission (NAHC), and additional contact was made with the groups and individuals named by the NAHC. In addition, each project site was entered into the Federal Communications Commission (FCC) Tower Construction Notification

System (TCNS), in an effort to increase communication with Native American groups in the context of the review required by Section 106 of the NHPA. This system provides Tribes, Native Hawaiian Organizations and the State Historic Preservation Office (SHPO) with early notification of proposed communications towers in order to facilitate compliance with the FCC rules, and to streamline the review process for the construction of towers and other FCC undertakings.

Visual Resources

Effects to visual resources were assessed using applicable Visual Resource Management (VRM) guidelines. For all but one of the six proposed project sites, VRM classifications have previously been established either through the resource management planning process or through interim classification processes undertaken during the evaluation of previous projects. For the project site where a VRM classification has not been established (Vidal Junction Communication Site), an interim classification was established as part of this EA. The VRM Site Data Sheets for each of the assessed sites can be found in Appendix D of this EA.

Visual simulations were created to help determine the *before* and *after* views of each of the project sites, with the exception of the County's two existing communication sites (Chuckwalla and Whitewater Communication Sites), where substantive changes to the existing visual environment are not currently proposed. Site photographs can be found with the individual Communication Site exhibits located in Appendix A of this EA, and the visual simulations are contained within Appendix D, Visual Resource Management Data. It should be noted that the towers depicted in the simulations have been generated to reflect the proposed tower height, while the overall design of each tower functions as a prototype. The actual placement of antennas may vary from site to site. Additional information regarding the VRM analysis can be found in Sections 4.0 and 5.0 of this EA.

SECTION 1: PURPOSE AND NEED OF THE PROPOSED ACTION

The County of Riverside desires to implement an improved public safety communication system to resolve radio coverage issues for public safety emergency responders. The County's fire and law enforcement agencies currently utilize approximately 25 communication sites throughout the County to provide public safety voice and data transmission capabilities to assigned personnel in the field. As currently configured, the system provides coverage to only about 60 percent of the County and is at the end of its useful life. Population growth within the County, particularly in areas that have been traditionally only sparsely populated, necessitates the expansion of the radio coverage footprint, and the current system is no longer adequate to meet the County's coverage and capacity needs. Additionally, due to increases in the County's radio voice and data usage, additional traffic-carrying capacity is required to meet the needs of emergency services personnel in the field. The proposed PSEC project is the expansion and upgrade of the system's capabilities and its associated infrastructure. This upgraded and expanded system will allow public safety officials to share information via voice and data on-demand and in real time over all types of topography throughout the County. The project has as its principal purpose the attainment of the following objectives:

- 1) Provide appropriate and adequate voice and data communication coverage to County emergency services personnel and their cooperators over at least 95 percent of the County's land area.
- 2) Allow for interoperability between providers in a manner that assures adequate communication capability during emergency incidents, including wildfires, earthquakes, large-scale releases of hazardous substances and other natural or man-made disasters that cross jurisdictional boundaries or require multiple-agency cooperation.
- 3) Provide a secure voice and data communication network that is not dependent upon commercial facilities for its operation.
- 4) Allow for co-location of facilities with other government agencies and jurisdictions.
- 5) Develop the system with the fewest effects to the environment as possible, while still meeting coverage needs and project objectives.
- 6) Develop the system cost-effectively and in a manner that provides the highest value and public service to the County and its citizens.

To meet the above requirements, the County will be constructing and operating approximately 65 new communication facilities throughout the County and adjacent portions of San Bernardino, San Diego, and Orange Counties. The County will also be upgrading its existing facilities to accommodate the improved communication network. Four new communication facilities and two existing facilities are proposed to be located, or are currently located, on federal lands managed by the BLM.

The County also intends to propose the construction of 10 or more additional communication sites on BLM lands beyond those that are evaluated in this EA. Those sites are still undergoing preliminary design and will be the subject of another EA (or EAs) when the design work has been completed. The County intends to submit applications for those sites to the BLM by the end of 2009.

1.1 – Need for Use of Federal Lands

As part of its environmental assessment and permit process, the BLM must consider whether or not a project can be feasibly accommodated on non-federal lands. In this case, the sites assessed in this EA cannot be feasibly accommodated on non-federal lands because alternative, non-federal land locations would not provide effective emergency communication services to those areas requiring coverage. Even though the proposed project is being undertaken by the County, the County and its emergency services personnel regularly provide emergency services on BLM lands as authorized by the BLM's mutual aid agreements with the County. During wildfire events and other emergencies on BLM lands, the County is an active cooperator with the BLM. The project would also provide facilities within which other federal agencies, such as the Department of Homeland Security, the Drug Enforcement Agency, the Department of Defense, and other government agencies could be collocated within the County's facilities. Therefore, even though the project is being proposed by a non-federal applicant (the County), the project presents opportunities for federal agencies to participate in furthering their own missions and duties. Also, since the County provides emergency services on BLM lands in accordance with applicable mutual aid agreements, the County would be providing a service to the BLM and the individuals and organizations that use BLM lands.

1.2 – Site-Specific Purpose and Need Requirements

The sites identified in the proposed action were selected to meet specific communication coverage requirements and also for their ability to interconnect with the larger PSEC communication network. The purpose and need for each of the proposed sites is as follows:

Chuckwalla Communication Site

This site is an existing County facility that requires replacement of the existing tower to meet current federal wind-loading standards. The site currently serves as a hub and a linkage for existing County communication sites in the eastern portion of the County. The upgraded facility will continue in this capacity and will also provide linkages to new sites within the larger PSEC network.

Corn Springs Communication Site

This site will provide communication coverage to a portion of the I-10 corridor, measuring approximately 10 miles in length, and located to the east of Desert Center. Specifically, it will enhance the ability of emergency responders to communicate via low-power portable radios (walkie-talkies) and will decrease reliance on non-portable vehicle-mounted radios. Portable radio capability is needed in situations such as traffic stops when officers must leave their vehicles. The Corn Springs site will be linked to the rest of the PSEC network by microwave through the County's proposed Wileys Well site and through the County's existing Black Rock site. The existing Black Rock site is located on non-federal lands, and is found to the west of Blythe.

Road 177 Communication Site

This site will provide communication coverage to the majority of SR-177 from Desert Center to the SR-62/SR-177 junction. This area currently has poor coverage due to the signal from the County's existing Chuckwalla site being shadowed by the Coxcomb Mountains. The site will be linked to the rest of the network by microwave through the County's proposed Corn Springs site and through the County's proposed Wileys Well site.

Vidal Junction Communication Site

This site will provide communication coverage for SR- 95 and SR-62, where there is currently no coverage. The site will be linked to the rest of the network by microwave through the County's proposed Hidden Valley site in Arizona and through the County's existing Big Maria site, located to the north of Blythe.

Whitewater Communication Site

This site is an existing County facility that requires replacement of the existing tower to meet current federal wind-loading standards. The existing equipment shelter requires upgrades as well. The site currently serves as a hub and a linkage for existing County communications between the western and eastern portions of the County. The upgraded facility will continue in this capacity, and will also provide linkages to new sites within the larger PSEC network.

Wileys Well Communication Site

This site will provide communication coverage to a portion of the I-10 corridor found between Corn Springs and Blythe, where portable signal strength is currently insufficient. The site will be linked to the rest of the network by microwave through the County's proposed Corn Springs site and through the County's existing Black Rock site. The existing Black Rock site is located on non-federal lands, and is found to the west of Blythe.

SECTION 2: DECISION TO BE MADE

The BLM will use this EA to determine the suitability of the County of Riverside's proposal to construct and operate public safety communication facilities on BLM lands. The EA will be used as a basis for decisions involving the entering into of leases with the County, the issuance of permits, and the application of restrictions or other measures to lessen identified environmental effects or to meet the adopted management goals of the BLM.

SECTION 3: ALTERNATIVES

3.1 – Alternatives Considered but Not Subjected to Detailed Analysis

A number of alternatives for the project were considered but were not carried forward for detailed analysis. Those alternatives and the reasons for their abandonment are provided below.

3.1.1 – Alternate Locations Alternative

This alternative would have built a comparable number of towers as the proposed action, but those towers would be in different locations than what has been proposed. The reasons for considering this alternative center around the possibility that the County may have been able to select different sites than the ones proposed and thus minimize or eliminate some or all of the project's impacts.

This project is somewhat different from other types of projects in that radio towers have limited options insofar as to where they can be placed while still fulfilling their intended purpose. The physical characteristics of radio science place specific constraints on where a facility can be located while still meeting radio coverage needs. Radio waves cannot travel through mountains, for example, and the strength of a signal decreases the further away one gets from a transmitter. Another consideration is the fact that radio networks are interconnected systems, meaning that each tower must be able to "see" other towers in a line-of-sight manner in order to transmit and receive signals to the rest of the network. In the case of radio, especially in an area as topographically diverse as Riverside County, there are few options in regards to tower placement if a particular area needs to be covered. This fact is particularly applicable to emergency services communication systems. In non-emergency networks (cellular telephones, etc.), a lack of coverage in a certain area is an inconvenience, whereas in an emergency services system, a lack of coverage could directly impact the ability of a provider to meet mission objectives (i.e., protection of life and property).

These facts make alternate site selection for public safety radio systems uniquely challenging. Nevertheless, the County went through a comprehensive site selection process with the goal of developing a system that provided the greatest level of radio coverage, while still minimizing impacts to the greatest extent possible. For most sites, candidate locations were chosen based on their ability to provide coverage to particular areas that had been identified as critical to meeting project objectives. Most final sites began with several candidates that were identified as possible locations from which coverage objectives could be met. For the four new sites on BLM lands that are assessed in this EA, nine candidate locations were identified from which the four new proposed sites were ultimately selected. Multiple candidates were identified to allow for design flexibility in case it was determined after further investigation that a specific location was not suitable.

Reasons for a candidate's lack of suitability and subsequent rejection could include lack of suitable radio coverage, undesirable environmental impacts, acquisition or access constraints, proximity to available commercial electric power, cost, and other factors. Since these potential constraints could not be

identified without further investigation, multiple candidates were identified for each site, with the understanding that many of the candidate locations would be dropped from consideration once a due-diligence investigation had been conducted. In this manner, the candidate that best met project objectives with the fewest constraints could be identified and ultimately selected.

Following a rigorous constraints analysis and design process, final site selection was undertaken using all of the information gathered. The first priority for any selected site was the provision of adequate radio coverage. During the site selection process, many otherwise suitable sites were rejected because they could not provide adequate coverage to specific areas. Other sites were rejected on environmental grounds or because they could not be feasibly acquired, accessed, constructed, or provided with commercial power.

It is theoretically possible that other candidates could be identified that could avoid some or all of the environmental impacts of the project. However, it is likely that radio coverage in many areas would be compromised. In some cases, sites were specifically selected to provide radio coverage to a particular area that has proven problematic from a law enforcement or fire protection perspective. In some cases, there simply is no alternative to providing coverage to these areas. Selection of an alternate site would essentially render these critical areas uncovered.

At this point, the County believes it has conducted sufficient due-diligence in the site selection process. For many sites, the supply of available candidates has essentially been exhausted and the proposed locations are the best that are available given numerous site-specific constraints. The end result of the site selection process are the proposed site locations presented and analyzed in this EA.

3.1.2 – Nonfederal Lands Alternative

As part of its environmental assessment and permit process, the BLM must consider whether or not a project can be feasibly accommodated on non-federal lands. In this case the project cannot be accommodated on non-federal lands because alternative locations outside of federal lands would not provide radio coverage to those areas requiring coverage. Even though the project is being undertaken by the County, the County and its emergency services personnel regularly provide emergency services on BLM lands as authorized by the BLM's mutual aid agreements with the County. During wildfire events and other emergencies on BLM lands, the County is an active cooperater with the BLM. The project would also provide facilities within which other federal agencies, such as the Department of Homeland Security, the Drug Enforcement Agency, the Department of Defense, and other governmental agencies could be collocated within the County's facilities. Therefore, even though the project is being proposed by a non-federal applicant (the County), the project does present opportunities for federal agencies to participate in furtherance of their own missions and duties. Also, since the County provides emergency services on BLM lands in accordance with applicable mutual aid agreements, the County would be providing a vital public service to the BLM and the individuals and organizations that use BLM lands.

3.1.3 – Stealth Treatments Alternative

The County investigated the feasibility of providing stealth-type concealment treatments for the tower sites, and came to the determination that the ultimate feasibility of these treatments for this project is unlikely. These treatments have been utilized extensively for cellular telephone towers, but the feasibility for two-way radio systems has not been established. Two-way systems utilize substantially different antennas that do not lend themselves well to placement in artificial tree-like structures. In addition, each tower in the PSEC project will utilize one or more microwave dishes, and it may not be possible to mount and adequately disguise these units on a stealth structure. The heights of many of the towers required for the PSEC project also place limitations on the use of stealth treatments, as treatments on towers over 85 feet in height are typically not feasible, both because of potential wind-loading concerns and also for aesthetic reasons. For these reasons, this EA will not present stealth treatments as an alternative.

3.1.4 – Alternative Technologies Alternative

This alternative would have abandoned the project as currently designed and instead provided emergency communication services through alternative technology. These technologies could include the use of satellites or other services that would not require the use of land-based networks and thus avoid the environmental effects of the proposed project.

The reason this alternative was abandoned is that it is simply not possible with current technologies. While satellite communication might seem like an easy answer to communication challenges, the ability to offer these types of services in a reliable and safe manner is probably many years away. For instance, satellite coverage typically requires line-of-site connectivity between the user and the satellite. For this reason, satellite communications do not work well in buildings or in areas where physical obstructions block the line-of-site. This is particularly problematic for law enforcement and fire personnel, who regularly work inside buildings and in situations where reliable communication is critical.

Satellite transmitters also present challenges in regards to the safety of users. Most persons view satellite technology based on experience with consumer electronics that utilize satellites, such as hand-held GPS units or satellite television. The critical distinction with these products, however, is that they are receiving devices only. They themselves do not transmit a signal. The signal they receive is actually a very weak signal due to its distance from the transmitter (i.e., the satellite). For these devices to be able to transmit with sufficient strength to actually communicate with the satellite, the transmission signal from the device would need to be substantially higher than levels considered safe for a hand-held device. Even short-term exposure to these excessive levels of signal strength would have implications for the safety of emergency service providers. For these reasons, this EA will not present alternative technologies as an alternative.

3.1.5 – Use of Existing Cellular Telephone Network Alternative

This alternative would have required the County's emergency services providers to utilize existing commercial cellular telephone networks to communicate. The County would not need to build any towers under this alternative, and all of the impacts identified in this EA would be avoided.

The reason this alternative was abandoned is that it simply would not provide the level of coverage and reliability that is required for an emergency services communication system. Anyone who has had experience with cellular telephones knows that coverage is inconsistent in many parts of the County and that reliability is far from certain. Buildings, topographic features, and other obstructions can block signals. Large portions of the County are not covered by commercial service and probably never will be due to the lack of consumer demand in more remote areas.

Cellular networks are also not capable of supporting the large quantities of data transmission that are required of an emergency services network. Most importantly, cellular networks do not provide instant, real-time communication. Typically, several seconds are required to obtain a signal (assuming a signal is available), and this type of delay is not acceptable in the emergency situations that providers are confronted with on a daily basis.

Additionally, commercial radio networks already carry a heavy traffic load, with the majority of calls being made by businesses and the general public. All these calls would be competing with the County's public safety personnel for airtime, potentially preventing calls critical to the protection of life and property from being made at a crucial moment. It is a widely known fact that commercial networks become congested to the point of failure during emergencies or disasters. This is not a tolerable situation for public safety agencies. For these reasons, this EA will not present the use of existing cellular telephone networks as an alternative.

3.1.6 – Taller Towers Alternative

This alternative would have provided taller towers, but fewer of them. The reason for considering this alternative would be that taller towers can provide coverage to larger areas, and therefore fewer towers would be needed. This would have the effect of reducing the number of towers and thus the impacts associated with them.

For this alternative to actually reduce the number of towers, the towers would all need to be substantially taller than what is now proposed. A 330-foot guy-line supported tower approaches the upper limit of feasibility for construction in this area. For example, if it is assumed that if all of the towers were increased to 330-feet in height, the number of towers might be reduced from six to perhaps three. This reduction in numbers is an assumption, and is not the result of any technical analysis that has been undertaken by the County. The reason this analysis has not been done is because there are already known constraints associated with radio science that indicate that this alternative is not feasible.

Despite what could commonly be assumed, doubling the height of a tower does not necessarily provide twice the area of coverage. This could theoretically be the case if an area were totally flat and devoid of any topographic relief. This approach could work in flat areas of the country, but it is not effective in Riverside County. The County has extreme variances in topographic relief, ranging from 228 below sea level at the Salton Sea up to 10,804 feet above sea level at San Jacinto Peak. In between these extremes lies an enormous variety of terrain, some of which is very rugged and broken. The variations within this terrain create “shadows” in radio coverage when signals are blocked by topographic features. In these situations, a smaller tower, strategically placed, can reach those areas that would be in shadow from a larger tower. It typically takes several smaller towers to effectively cover areas that would otherwise be in shadow if only a single taller tower were used.

Taller towers can sometimes actually extend coverage into areas where their signals can cause interference with other users and jurisdictions. Towers must be sized and designed carefully so that they will provide coverage to a desired area while avoiding “bleeding” excessive signal to areas where coverage is neither needed nor desired. The FCC regulates this type of interference, and taller towers can contribute to severe interference conditions in these situations.

In regards to aesthetic and visual resource impacts, having fewer but taller towers could possibly reduce these impacts, but not in any meaningful sense. Taller towers can be seen from greater distances and tend to be more intrusive. They require strobe lights and high-visibility paint schemes that add to the aesthetic impact. There is essentially no way to feasibly mitigate the impact of an extremely tall tower. Depending on their design, taller towers can also create greater areas of ground disturbance and can thus cause greater impacts to biological and cultural resources. For these reasons, this EA will not present the use of taller towers as an alternative.

3.1.7 – Lower Towers Alternative

This alternative would have provided greater numbers of towers of lower height to cover the same area. Under this alternative, the number of towers would increase by a substantial amount from what is proposed. The purpose of this alternative would be to lessen the aesthetic impacts of the project by using smaller towers exclusively. While the number of towers would actually increase, the idea would be that smaller towers would be less obtrusive and easier to conceal than taller towers.

Smaller towers are generally considered less visually obtrusive than taller towers, and if concealment technology for these towers were ever to become feasible, it could be possible to conceal these towers at some point in the future. However, while this approach could possibly reduce aesthetic impacts, it would also create additional impacts in other areas. More towers would create ground disturbance in more areas, and would also require more roads, more powerlines, and would consume more resources during construction and operation. The financial cost of the project would increase substantially, since more towers would mean more sites to acquire and more facilities to construct. For these reasons, this EA will not present the use of lower towers as an alternative.

3.1.8 – Alternatives Summary

Owing to the rigorous site selection process already undertaken, and also considering the fundamental constraints placed on the project by the physical characteristics of radio science, the No Action alternative is the only feasible alternative to the Proposed Action that is available to this project. Since the proposed site locations and network design represent the best and only option currently available to obtain the desired emergency services radio coverage, the only alternative available to reduce the environmental impacts of the project is the No Action alternative. Therefore, this EA will only analyze the Proposed Action and the No Action Alternative.

3.2 – Proposed Action

The proposed action consists of the construction, operation, and maintenance of four new communication sites and the reconstruction and improvement of two existing communication sites on BLM lands.

Exhibit 1 provides a regional map with each communication site location identified. Table 1 provides specific information about each site. Besides providing the locations of the sites, the table also presents the general characteristics of each site, including tower height and equipment shelter size. Additional information about each site, including detailed maps, land management status information, aerial photographs, site photographs, and other information can be found with the individual communication site exhibits contained in Appendix A of this EA.

Co-location is a significant component of the PSEC project. This means that other government users may maintain a presence at PSEC sites. Besides the County, other users could include other law enforcement and emergency service agencies, local governments, land management agencies, and other government organizations. Co-location allows for cost sharing between agencies, as well as ease of maintenance. Co-location can also reduce the number of individual communication sites that would be otherwise required if each agency were to construct their own separate facilities.

Co-location with non-government or commercial operators can create maintenance and security problems, since non-authorized individuals can gain access to vital public safety communication equipment if the equipment is located in the same space as a commercial user. For this reason, co-location at PSEC sites will only be available to other government organizations. Conversely, the County will not be collocating its equipment within facilities not under its direct control or not under the control of an appropriate government entity.

3.2.1 – New Facilities Overview

The PSEC facilities on BLM lands will consist of the construction of four new communication sites, and the reconstruction and improvement of two existing County facilities, for a total of six sites. This EA will assess all six sites, but for purposes of clarity, the sites will either be characterized as an existing site or a new site, depending on their type. The two existing sites (Chuckwalla and Whitewater Communication Sites) require replacement of the existing towers and, in the case of Whitewater, improvement of the

existing equipment shelter as well. The proposed action for those two sites is described later in Section 3.2.2. The four new sites (Corn Springs, Road 177, Vidal Junction, Wileys Well Communication Sites) involve the construction of all new facilities on lands that are currently undeveloped. The proposed action for those sites is described below.

The footprint for each new site will typically measure 65 feet by 65 feet (4,225 square feet), within a 100-foot by 100-foot (10,000 square feet/0.23-acre) lease area. An additional 100-foot by 100-foot temporary staging area adjacent to each site is also proposed to facilitate site construction and the temporary laying down of building materials. Each site will be composed of four principal components: 1) tower; 2) equipment shelter and supporting components; 3) road access; and 4) electrical power provision. A drawing of a typical site's layout is provided as Exhibit 2, and additional information about each of these components is provided below. Detailed site plans that illustrate the proposed work for each of the sites can be found with the individual Communication Site exhibits located in Appendix A.

3.2.1.1 – Towers

Towers will be constructed using a self-supporting, three-legged, lattice-type style and will range from 80 feet to 200 feet in height. A photograph showing a typical self-supporting tower is provided as Exhibit 3 and Table 1 provides the proposed heights of each of the towers. The towers will serve as the structures upon which the communication equipment will be mounted. Each tower will be placed upon a concrete slab foundation, and could consist of either cast-in-place caissons or shallow foundations designed to carry axial loads and moments of force applied by wind and other factors on the tower. Towers, foundations, and all other structures on each site will be built to professional standards and appropriate building codes. Soil tests and other investigations will be performed at each site to determine the specific foundation requirements at each site. All towers and other structures will be subject to review by County engineers to ensure compliance with applicable standards and codes.

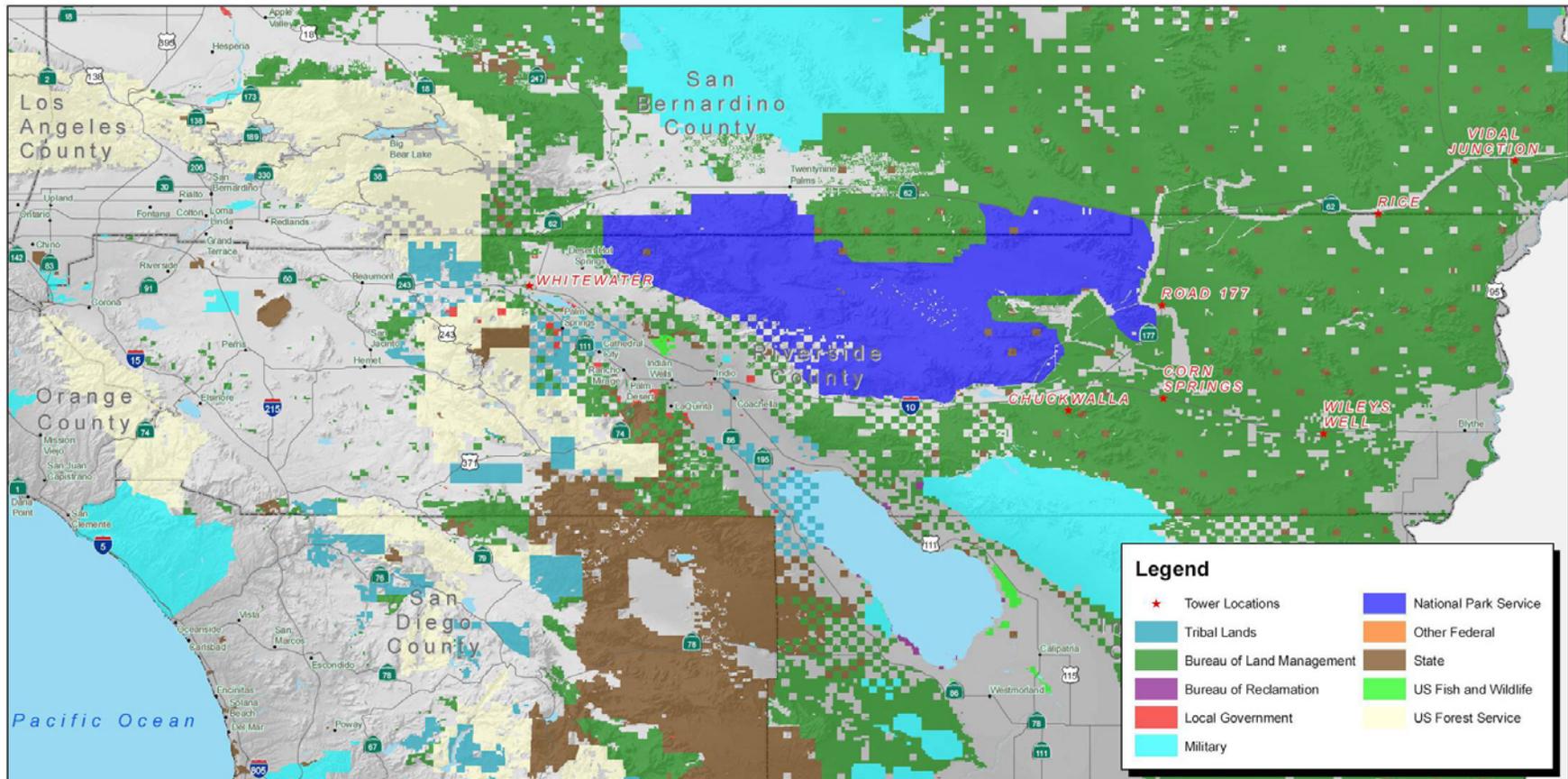
Tower Visual Treatments

The structural members and bracing units of the towers will be constructed of industry-standard galvanized steel with a silver-gray color tone. Over a period of several years, the galvanized steel weathers to a dull gray that minimizes the structure's contrast to the sky and background landscapes, and is rendered less visibly intrusive.

Tower-Mounted Communication Equipment

The communication equipment installed on each tower will vary depending on the specific coverage requirements for each site. Typical equipment will include several omni antennas, VHF antennas, and microwave dishes. A grounding system will also be installed. See the site plan exhibits in Appendix A of this EA for a description of the specific electronic communication equipment proposed for each site.

Exhibit 1: Proposed Tower Locations Map



Source: US Census data and Riverside County.



Exhibit 1
 Proposed Tower Locations Map

100006021 - 082009 GeneralLocation_candidate_EA_BLM.mxd

COUNTY OF RIVERSIDE - PSEC PROJECT - ENVIRONMENTAL ASSESSMENT

Table 1: Information for Sites on BLM Lands

Site Name	Latitude ¹	Longitude ¹	Elevation (feet) ²	Applicable BLM Management Plan ³	USGS Quadrangle	Township/Range/Section	Tower Height (feet)	Shelter Size (feet)	Access Road Length (feet) ⁴	Power Line Length (feet)
Existing Sites										
Chuckwalla	33°39'18.7"	115°27'13.5"	3,760	NECO	Desert Center	T6S, R15E Sec. 7	80' existing (to be removed), 80' replacement	22' x 42' existing to remain unchanged	Existing access road, no changes proposed	Existing powerline, no changes proposed
Whitewater	33°55'26.2"	116°37'01.1"	1,730	CVA	Desert Hot Springs	T3S, R3E Sec. 12	100' existing (to be removed), 100' replacement	13' x 24', 11' x 27' existing, 26' x 33' replacement	Existing access road, no changes proposed	Existing powerline, no changes proposed
New Sites										
Corn Springs	33°40'52.9"	115°14'55.1"	726	NECO	Sidewinder Well	T6S, R17E Sec. 6	100'	12' x 26'	40'	200'
Road 177	33°52'54.6"	115°15'07.7"	603	NECO	Coxcomb Mts.	T3S, R16E Sec. 25	100'	12' x 26'	40'	300'
Vidal Junction	34°11'37.3"	114°29'20.3"	941	NECO	Parker NW	T1N, R24E Sec. 8	170'	12' x 26'	40'	150'
Wileys Well	33°36'18.5"	114°54'09.3"	391	NECO	Hopkins Well	T6S, R20E Sec. 33	150'	12' x 26'	200'	100'
<p>Notes: 1 – All coordinates utilize NAD83 datum 2 – Elevation above mean sea level 3 – NECO = Northern and Eastern Colorado Coordinated Management Plan; CVA = Coachella Valley Amendment to the California Desert Conservation Area Plan 4 – The road lengths provided constitute areas of new disturbance only. Access via existing roadways is not included. All access easements are proposed to be 12 feet in width.</p>										

Tower Visual Treatments

The structural members and bracing units of the towers will be constructed of industry-standard galvanized steel with a silver-gray color tone. Over a period of several years, the galvanized steel weathers to a dull gray that minimizes the structure's contrast to the sky and background landscapes, and is rendered less visibly intrusive.

Tower-Mounted Communication Equipment

The communication equipment installed on each tower will vary depending on the specific coverage requirements for each site. Typical equipment will include several omni antennas, VHF antennas, and microwave dishes. A grounding system will also be installed. See the site plan exhibits in Appendix A of this EA for a description of the specific electronic communication equipment proposed for each site.

Aircraft Avoidance Components

Federal Aviation Administration (FAA) regulations require that any tower over 200 feet in height be fitted with an aviation warning beacon at its apex and/or an alternating red and white paint scheme on the tower structure. Both the beacons and the paint schemes are intended to guard against potential hazards to aircraft that might be operating in the area. Final determination of the requirements for each tower are at the discretion of the FAA, but at this time, none of the proposed sites have been identified as requiring an aviation warning beacon and/or an alternating paint scheme.

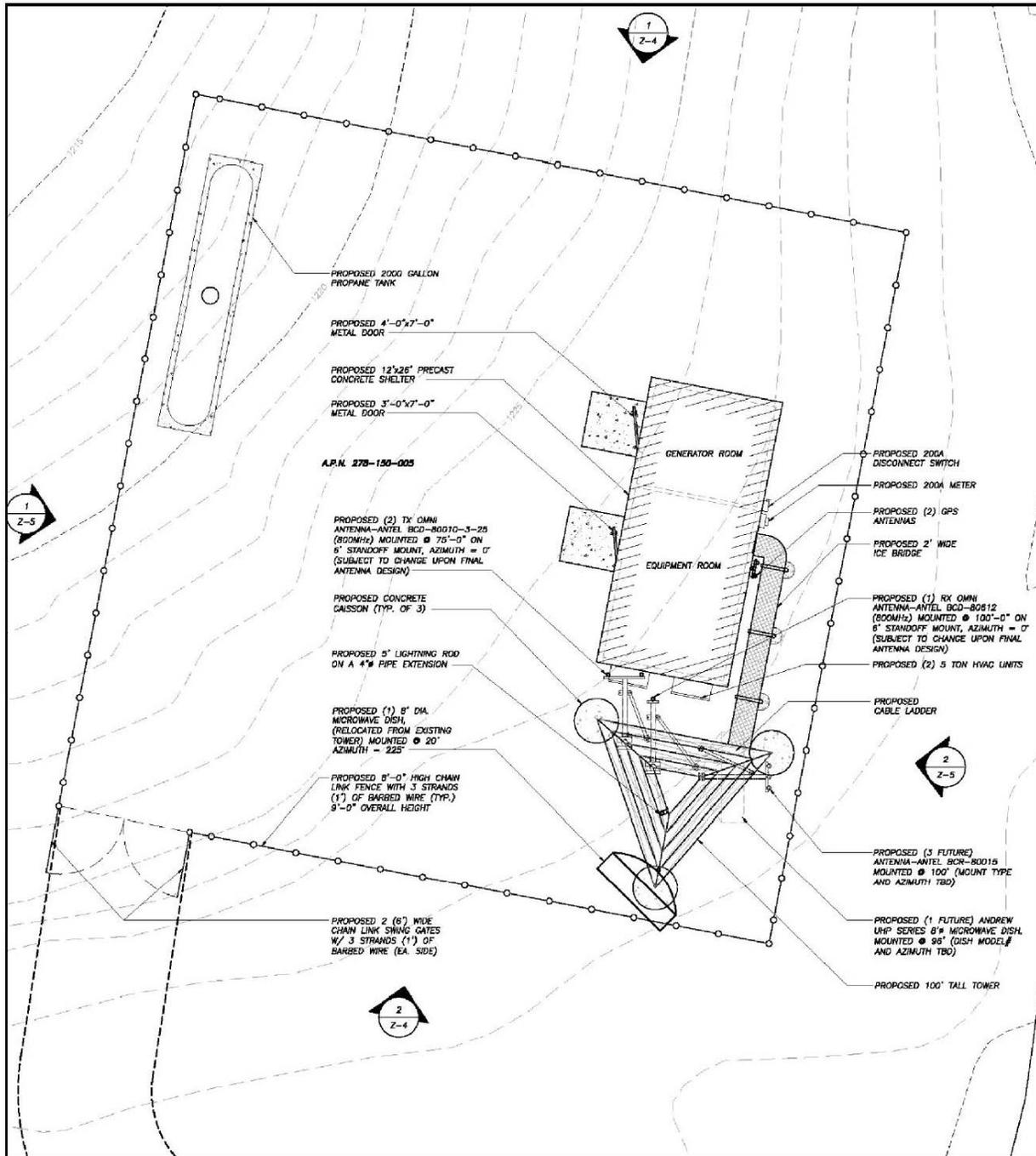
If the FAA determines that an aviation warning beacon is required, the lighting will follow suggested USFWS guidelines established to minimize the light's attraction to birds. According to the guidelines, lights should be up-shielded and their intensity decreased to minimum required levels. In addition, the number of flashes per minute (i.e., the amount of time between flashes) should be lessened. These measures have been shown to decrease the light's attractiveness to birds. Additional evidence presented in the guidelines suggests that birds are less attracted to white strobe lights than solid red or pulsating red warning lights. Adoption of these and other recommendations provided in the USFWS guidelines will serve to minimize undue impacts to birds.

3.2.1.2 – Equipment Shelters and Supporting Components

Each site will include an equipment shelter adjacent to the towers to house interior communication equipment and supporting components. Shelters will be prefabricated industry standard units that will be constructed offsite and brought in by truck. See Table 1 for a listing of the shelter sizes proposed at each of the sites.

Shelters will be mounted on concrete foundations sized according to shelter dimensions and other design requirements. The structures will typically be divided into two or more compartments or rooms, with one or more rooms housing the communication equipment and a separate room housing a standby generator.

Exhibit 2: Typical Site Layout



Source: MOTOROLA INC. 2008



Exhibit 2
 Typical Site Layout

100006021 - 052009 | 2_typical_site_layout

COUNTY OF RIVERSIDE - PSEC PROJECT - ENVIRONMENTAL ASSESSEMENT

Exhibit 3: Photograph of Typical Self-Supporting Tower Site



Source: MOTOROLA INC. 2008



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Exhibit 3
Photograph of Typical Self-Supporting Tower Site

COUNTY OF RIVERSIDE - PSEC PROJECT - ENVIRONMENTAL ASSESSMENT

Besides the radio equipment and generator, the other principal component of the shelter will be an environmental control system for heating, ventilation, and air conditioning (HVAC) to keep the interior of the shelter within the temperature range required for the operation of the electronic communication equipment inside.

Generators

Standby generators will be installed at each site to provide electric power in the event of a commercial power failure. Standby generators will be powered by propane, and will typically be comprised of a 56 horsepower internal combustion engine power unit driving a single-phase 50 kilowatt generator. Generators will be mounted inside the shelter, and will include a muffler on the power units and appropriate sound proofing within the walls of the shelter to minimize noise. Propane fuel will be provided from tank mounted outside the shelter on concrete slabs. The propane tank(s) will be sized in a manner to allow for a constant generator run time of up to 168 hours or one week, in the event of a long-term power failure. The typical size needed to meet this requirement is 2,000 gallons.

Fencing and Lighting

Each tower and shelter will be enclosed within a chain link fence measuring 8 feet in height, with three strands of barbed wire on the top, totaling 9 feet in height. A gate will provide access into the site for persons and vehicles. A downward-shielded security light will be mounted to the outside of each shelter. The light will be connected to a motion sensor that will turn the light on when movement is detected within the compound.

Energy Efficiency

Equipment shelters will be engineered and constructed to enhance the energy efficiency of each site. Shelters will utilize energy efficient lighting and lighting control systems. The primary use of electricity at each site will be for the HVAC equipment. This equipment will be used to keep the interior of the shelters within the temperature range required for the operation of the electronic communication equipment inside. To minimize the use of air conditioning, each shelter will be heavily insulated, especially the roofs, which will be of metal construction or concrete on the pre-fabricated buildings, and painted white to maximize the reflection of heat created by sunlight. The air conditioning units will be industrial, high-efficiency, Title 24 compliant units that will not utilize either HCFC-22 or HCFC-142b as refrigerants. These compounds are a significant contributor to greenhouse gas emissions and the U.S. Environmental Protection Agency (EPA) will be phasing out their use in 2010.

3.2.1.3 – Road Access

Each of the proposed sites has a road leading directly to or immediately adjacent to the area where the tower and shelter will be located. In cases where a road does not lead directly to the site, and is instead adjacent to the site, a short spur road will be required to be constructed to provide access to the site. All

roads are anticipated to be dirt only, unless particular site conditions require some form of hardening or additional improvement. The lengths of these roadways will vary from site to site. Information about road lengths can be found in Table 1, and additional information about access roads can be found with the individual Communication Site exhibits located in Appendix A of this EA.

3.2.1.4 – Commercial Electric Power Provision

Each of the proposed new sites has commercial power immediately adjacent, and provision of power to these sites will require a simple extension from existing sources. Power runs to these sites will be of minimal length, and will be run either above- or below-ground, depending upon site characteristics and the existing power delivery system in the area. Information about the length of the power runs at each site is provided in Table 1, and additional information about power provision can be found with the individual Communication Site exhibits located in Appendix A of this EA.

3.2.2 – Existing Facilities Overview

As was noted earlier, two existing County communication sites (Chuckwalla and Whitewater Communication Sites) require replacement of the existing towers and, in the case of the Whitewater site, improvement of the existing equipment shelter. These facilities have been operating under BLM leases for many years. However, both facilities are nearing the end of their useful service lives and will require some level of reconstruction and improvement to accommodate the upgraded PSEC communication system. Ultimately, these two existing sites will be very similar in function and appearance to the new proposed sites described above, but they will essentially contain replacement components rather than completely new facilities. Specific information about the upgrades at each site is presented below. Detailed site plans that illustrate the proposed work for each of the sites can be found with the individual Communication Site exhibits located in Appendix A of this EA.

3.2.2.1 – Chuckwalla Communication Site

The Chuckwalla facility currently consists of an 80-foot self-supporting tower and 22-foot by 42-foot concrete block equipment shelter. The existing tower does not meet the current wind-bearing requirements of a sustained 120 miles per hour (mph) gust, and replacement will be required to accommodate the updated communication equipment proposed by the PSEC upgrade project. However, since the existing tower is still in use and is currently carrying emergency services communication traffic, it must remain in place and fully operational while the replacement tower is constructed. Once the replacement tower is complete and operational, the existing tower will be removed from the site.

The existing tower is located behind the existing equipment shelter. The replacement tower is proposed to be located in front of the equipment shelter and within the County's existing lease area. This will allow for construction of the replacement tower without interrupting the operation of the existing tower. The replacement tower will be of the same height and possess the same style and functional characteristics as the existing tower.

The existing equipment shelter at the Chuckwalla site will not require substantive modifications beyond interior modifications and the rearrangement of existing electronics within the equipment shelter. No exterior modifications or changes to the shelter's footprint are proposed. However, the existing 500-gallon propane tank would be removed from the site and replaced with a 2,000-gallon unit.

3.2.2.2 – *Whitewater Communication Site*

The Whitewater facility currently consists of a 100-foot self-supporting tower and two separate equipment shelters. The first shelter is an industry-standard, prefabricated unit measuring 11-feet by 27-feet. The second shelter is a 13-foot by 24-foot concrete block building. Similar to the situation at the Chuckwalla site, the existing tower at the Whitewater facility does not meet current wind-bearing requirements and requires replacement. Also like the Chuckwalla site, the existing tower must remain fully operational while the replacement tower is constructed. Once the replacement tower is complete and operational, the existing tower will be removed from the site. The replacement tower will be located adjacent to the existing concrete block equipment shelter and will be of the same height and possess the same style and functional characteristics as the existing tower.

Unlike the Chuckwalla facility, the existing equipment shelter at the Whitewater site requires substantive external modifications. The existing 11-foot by 27-foot prefabricated unit is at capacity, and is near the end of its useful service life. Rather than replacing the prefabricated unit with another prefabricated structure, the County proposes to completely remove the existing unit and add another room to the existing concrete block building. The addition would measure 20-feet by 20-feet, and would be constructed of concrete block to match the existing structure. The final completed structure would measure approximately 26-feet by 33-feet. An enlarged 2,000-gallon propane tank would also be installed at the site and enclosed within a block wall, measuring 6 feet in height.

3.3.3 – **Project Construction Overview**

Construction at both the new and existing sites will be very similar, with the only exception being that the existing towers will be removed once the replacement towers are completed at the two existing sites. Otherwise, the construction process will be identical at both existing and new sites. A general sequence of construction activities is provided below.

3.3.3.1 – *Pre-Construction Geotechnical Assessment*

Prior to construction, the soils and substrate at each site will be sampled and tested to assist in tower foundation design. Typically, a mobile boring machine will be utilized to bore a number of 6- to 8-inch diameter holes using a hollow boring auger. These tests will only be conducted within the area of the proposed project footprint. Soils density tests will be performed at specified levels and samples will be collected for laboratory analysis. This information will be used to determine the tower foundation designs and methods of construction. As per occupational safety and desert tortoise habitat regulations, the holes

will be backfilled immediately following the drilling and analysis processes and prior to moving to the next boring location.

3.3.3.2 – General Construction Process

Generally, construction at each site will proceed in typical fashion, with site preparation and grading occurring first, followed by excavation for tower footings and shelter slabs. Depending on foundation design, auguring may be required for placement of caissons. Following placement of necessary foundations, the tower will be erected and the shelter and supporting components put in place. Prefabricated shelters will usually arrive onsite with all of their internal components already installed. Sites that are practically accessible by concrete trucks will have premixed concrete delivered directly to the site. Sites that are remote or otherwise inaccessible by concrete trucks will require a batch concrete mixing station to be located onsite with water hauled in using water trucks. Concrete mixing and other staging operations would only take place within designated temporary staging areas.

Construction equipment to be used onsite will vary according to site characteristics and the type of work to be done, but equipment will likely be confined to that listed below in Table 2. All of the equipment listed in the table may not be necessary at each site, nor would it all be operating at the same time.

Table 2: Construction Equipment

Equipment Type	Quantity
Drill Rig/Boring Machine	1
Tractors/Loaders/Backhoes	1
Bulldozer	1
Water Truck	1
Cement/Mortar Mixers	2
Crane	1
Portable Generator	1
Source: GRD, Inc.	

Each site is expected to take 60 to 120 days to construct. The actual time period will vary depending on difficulty of construction, the remoteness of the site, and other factors. The number of workers at each site on any given day during construction will typically vary from four to six.

Following completion of the construction process, all debris and waste materials will be removed from the site and disposed of in accordance with applicable regulations. At the two existing sites (Chuckwalla and Whitewater Communication Sites), the existing towers will be dismantled and removed from the site. Existing tower foundations will be abandoned in place.

3.3.3.3 – Construction Practices Adopted to Minimize Environmental Impacts

During construction, a number of measures will be implemented to minimize the potential for undue impacts on the environment. These measures are briefly described below.

Construction Activities in Desert Tortoise Habitat

The USFWS, the BLM, the Desert Tortoise Council, and a number of other organizations have adopted a series of measures designed to minimize or eliminate unauthorized take of desert tortoise during construction activities. These measures will be implemented during construction at all sites where suitable habitat for tortoise is present. The requirements of these measures are explained in detail in Section 7.0 of this EA, but can be briefly summarized as follows:

Pre-construction clearance surveys of the affected area by a qualified biologist and the installation of tortoise-proof fencing around the project site once the site is cleared.

- 1) The appointment of a Field Contact Representative (FCR) at each site to oversee construction operations and to ensure that all required protection measures are being adequately implemented.
- 2) Onsite monitoring of construction activities as necessary by a qualified biologist.
- 3) Training by a qualified biologist of all project-related personnel and contractors in a desert tortoise education program.
- 4) Appropriate marking of areas of allowed surface disturbance. All surface disturbance shall be limited to the minimum area possible and any disturbance outside of that area will be restricted. This restriction applies to the site itself, as well as all temporary staging and parking areas.
- 5) Adoption of appropriate stewardship practices, such as containment of all trash, restraint of dogs, the use of portable toilets, and immediate backfilling of all excavations to prevent possible tortoise entrapment.

Invasive Species Control Measures

A number of invasive plant species are known to occur throughout the region, and control measures will be implemented during construction to limit the further spread of these species. Specific requirements will be further detailed in the BLM's final conditions of approval, but will likely include the following Best Management Practices (BMP):

- 1) Having a monitoring and treatment plan in place for specific sites and species.
- 2) Procuring gravel, base materials, and other imported earthen products that are weed free or are washed prior to transport to the site.
- 3) Providing a vehicle and equipment wash station in an offsite area to minimize the inadvertent transport of noxious weed seeds into undisturbed areas. Mud and other material on equipment that could contain noxious weed seeds would be removed at a location where the equipment washing itself would not introduce noxious weeds into unaffected areas.

- 4) Minimizing soil disturbance.

Water Quality Control Measures

In addition to any construction and operation requirements imposed by the BLM, the proposed action is being undertaken by the County of Riverside, and is thus required to abide by the construction permitting requirements of the County. A number of project-specific requirements have been adopted by the County and can be briefly summarized as follows:

- 1) The County has prepared and will implement erosion and sediment control plans to help protect water quality.
- 2) Site-specific Emergency Response Plans (ERPs) have been prepared and will be posted/implemented at every site to provide for any contingencies that could arise during construction or operation. The ERP will provide direction regarding specific actions to be taken in the event of spillage, leakage, or upset at any of the sites.

3.3.4 – Project Operation Overview

The facilities will operate 24 hours a day, 7 days a week for the life of the site. The electronic equipment housed in the shelters will be temperature controlled by wall-mounted HVAC units. During warmer periods of the year, the cooling units could periodically be in operation 24 hours a day. Security lighting will be installed outside of each shelter within the chain link enclosure, usually on the exterior wall of the shelter, and will be controlled by means of a motion sensor.

Emergency standby generators will switch on automatically once per week, and run for a period of 30 minutes. This will be done to ensure the maintenance of adequate lubrication within the units, as well as to test the units for proper operation. Each unit will be equipped with a sensor to report the unit's operational status. In the event of a fault, a technician will be automatically dispatched to conduct repairs.

Refills of the fuel for the generators will require periodic visits by a fuel truck. Fuel levels will be monitored by a remote system, and when the fuel supply has dropped below a certain level, a fuel truck will be dispatched. For emergency standby units operating under the weekly test regime, refills will occur approximately every two years. A power outage requiring prolonged generator operation would require more frequent visits.

Besides fuel truck visits, maintenance activities at the sites would consist of monthly visits by technicians associated with each of the organizations having equipment at the site. The PSEC project will not only provide facilities for the County's radio equipment, but it will also provide facilities for its cooperators. This could include other law enforcement and emergency service agencies, local governments, land management agencies, and other government organizations. Therefore, the number of maintenance visits to a given site could vary, depending on the number of users associated with the equipment at the facility.

Regardless, the amount of activity at any given site, once it is constructed and fully operational, is expected to be minimal.

3.3 – No Action Alternative

Under the No Action alternative, a Communication Use Lease would not be authorized. The Proposed Action would not be undertaken and the County would continue to utilize its existing emergency services communication network into the foreseeable future. No new facilities would be built. Enhanced and expanded emergency services communication coverage would not be provided. Existing management and use of the sites would continue to be subject to applicable statutes, regulations, policies, and land use plans.

SECTION 4: AFFECTED ENVIRONMENT

4.1 – Chuckwalla Communication Site

4.1.1 – Area Description

The Chuckwalla Communication Site is an existing County communication facility that has been operating under a BLM lease for many years. The site is part of a larger communication site complex located atop a peak in the northern Chuckwalla Mountains, approximately five miles southwest of Desert Center. The current Riverside County facility consists of an 80-foot, self-supporting lattice-style tower and a 22-foot by 42-foot block masonry equipment shelter. Approximately 12 communication towers and their associated infrastructure (equipment shelters, powerlines, etc.) are located immediately adjacent to the County facility. The site is accessible via an unimproved dirt road that winds several miles from the valley floor to the mountaintop. Commercial electric power is available at the site, and is supplied to the communication complex from the valley floor via an existing utility-line.

Due to the existing operations at the site and with the immediate vicinity, vegetative cover is minimal and disturbance within the site footprint and surrounding areas is essentially complete. See Appendix A of this EA for an overview of the site, its location and site-specific photographs.

4.1.2 – Land Use Plan Designation/Classification

The site is located within the NECO planning area of the California Desert Conservation Area (CDCA), and is managed by the Palm Springs-South Coast Field Office. The area is subject to the planning criteria established in the NECO Coordinated Management Plan (CMP). Under the plan the site is designated as Multiple Use Class L (Limited Use). Lands classified as Class L are intended to be managed in a manner that provides for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished.

The site is included in the Chuckwalla Mountain Communication Site Plan. The plan allows for the maintenance and modification of existing facilities in accordance with right-of-way grants and applicable regulations. NEPA requirements must be met, and a 30-day public comment period is required for EAs of communication systems of three or more sites.

The larger Chuckwalla Mountain Communication Site Complex is located on a cherry-stemmed, non-Wilderness parcel within the Chuckwalla Mountains Wilderness Area. The site and the roadway leading to it were excluded from Wilderness designation when the Wilderness Area was created in 1994.

4.1.3 – Wildlife and Botany

The site itself is devoid of vegetation and most of the mountaintop has previously been leveled to accommodate the existing communication complex. Ongoing operations and vehicle parking within and around the site preclude the reestablishment of vegetation. The undisturbed areas outside of the site are

vegetated by plant species typical of the Lower Colorado River subdivision of the Sonoran Desert, with some additional species present due to the site's mountaintop location. The dominant perennial plants in the vicinity include creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), ocotillo (*Forqueria splendens*), and yucca (*Yucca* sp.).

The site is located within USFWS-designated Critical Habitat for the desert tortoise (*Gopherus agassizii*). However, the Primary Constituent Elements (PCEs) for suitable desert tortoise habitat include sandy flats and mountain bajadas where suitable soils for den construction can be found. These PCEs are not present onsite; instead, the site consists primarily of granitic bedrock with very steep slopes and minimal soil development. Therefore, it can be reasonably determined that the potential for tortoises to occur in the immediate vicinity is very low. Regardless, the proposed action is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be required to be followed during construction activities at this site.

Although the site does not support PCEs for desert tortoise, the site is located within the Chuckwalla Desert Wildlife Management Unit (DWMA)/Area of Critical Environmental Concern (ACEC). No other Federally-listed species occur at the project site. Additional information relating to wildlife and botany on the project site can be found in the Biological Resources Assessment for the site, located in Appendix B of this EA.

4.1.4 – Cultural Resources

An existing literature review and records search was conducted for the Chuckwalla Communication Site Area of Potential Effect (APE), and for all lands within one mile of the facility. The APE was defined by considering the finite Chuckwalla tower site with a 300-foot buffer extending in every direction to account for potential indirect impacts or minute changes to tower placement. The records search was initially conducted at the Eastern Information Center located at the University of California, Riverside in May of 2007, and was subsequently updated on May 14, 2009.

The records search indicated that there were no known and recorded cultural resources located within or adjacent to the APE, and that the APE had been previously surveyed once for the presence or absence of cultural resources. This study was conducted in 2003 (RI-5974) and returned negative results for observable cultural resources within the APE. This report is the only study that has assessed the lands within one mile of the project site, and this study failed to identify any cultural resources. Based upon these results, known and recorded cultural resources are neither present within the APE nor within one mile in any direction.

A Class III intensive pedestrian survey was conducted for the APE by a project archaeologist on June 27, 2007. The survey area encompassed approximately 0.5-acres, as portions of the 6.5-acre APE were

inaccessible due to the presence of fractured rock on steep slopes. Those portions not surveyed in their entirety were visually scrutinized for the presence of cultural resources from safe vantage points. During the pedestrian survey, no previously undetected cultural resources were observed within or adjacent to the APE.

Additional information regarding the assessment of this project site, including a detailed outline of the affected environment can be found in Appendix C.4 of the Cultural Resources Assessment, included as Appendix C of this EA.

4.1.5 – Visual Resources

The Chuckwalla Communication Site is located atop an unnamed peak in the northern portion of the Chuckwalla Mountains. The Chuckwalla Mountains are a typical Basin and Range mountain mass, with sharp peaks surrounded by gently sloping bajadas above the valley floor. Vegetation is sparse, and is typical of the Lower Colorado River subdivision of the Sonoran Desert.

The majority of viewers can see the site from several miles away as they travel along I-10. The dominant visual feature of the site and its surrounding area is the communication complex itself. Approximately 12 communication towers are present within the complex, and the County's existing site is virtually indistinguishable from the other existing facilities. For a visual overview of the site and the surrounding area, refer to the site photographs in Appendix A of this EA.

The Chuckwalla project site is located on BLM lands that have not been assigned formal VRM classifications through the resource management planning (RMP) process. Where no formal VRM classes have been assigned, it is BLM policy that interim visual management objectives be assigned that are consistent with the guidelines provided in BLM Manual 8410.

An interim classification was established for the project site by the BLM as part of the analysis undertaken during preparation of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Devers-Palo Verde No. 2 Transmission Line Project. During the VRM assessment stage of the Devers-Palo Verde project, VRM classifications were established for areas extending several miles on either side of the proposed transmission line corridor, which roughly paralleled I-10 from the Colorado River to the Devers substation north of Palm Springs. The Chuckwalla Communication Site is within one of the areas that were classified during this process. The site area was assigned a VRM classification of Class 2. Management objectives for areas within this class are to retain the existing character of the landscape, where the level of change to the characteristic landscape should be very low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

4.2 – Corn Springs Communication Site

4.2.1 – Area Description

The proposed Corn Springs Communication Site is located immediately southwest of the Corn Springs Road interchange on I-10, approximately 0.25 mile south of the freeway and nine miles east of Desert Center. The site is adjacent to an existing 150-foot monopole communication tower, and is accessed via a paved frontage road that extends westward from the interchange along the south side of the freeway. From the paved frontage road, an unimproved dirt road leads approximately 600 feet south to the existing and adjacent communication site. The proposed Corn Springs Communication Site is located adjacent to this existing unimproved dirt roadway. Commercial electric power is available at the existing and adjacent communication site, and reaches the area via an existing utility-line.

South of the site lies a desert bajada that slopes gently upward toward the Chuckwalla Mountains. A high-tension electric transmission line parallels I-10, approximately one mile to the south. A series of levees are located to the south of the site that intercept and redirect storm water flows from the various washes that trend toward the valley floor. The levees direct water flows to various culverts that carry stormwater under the freeway.

The proposed site has experienced moderate disturbance as a result of the construction and operational activities at the adjacent communication site. However, vegetation and soils at the site remain relatively intact. See Appendix A of this EA for site photographs, an overview of the site and its location.

4.2.2 – Land Use Plan Designation/Classification

The site is located within the NECO planning area of the CDCA, and is managed from the Palm Springs-South Coast Field Office. The area is subject to the planning criteria established in the NECO CMP. Under the plan the site is designated as Multiple Use Class L (Limited Use). Lands classified as Class L are intended to be managed in a manner that provides for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished. New communication sites are allowable within Class L lands. NEPA requirements must be met, and a 30-day public comment period is required for Environmental Assessments of communication systems of three or more sites.

4.2.3 – Wildlife and Botany

The site is vegetated by plant species typical of the Lower Colorado River subdivision of the Sonoran Desert. The dominant perennial plants in the vicinity include creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), and sparse occurrences of ironwood (*Olneya tesota*). Soils consist primarily of silty sand with occasional pebbly patches. Drainage appears to occur primarily by sheetflow, though one very shallow and poorly-defined dry desert channel is found to the west of the site. The series of levees lying south of the site have largely intercepted and diverted sheetflows away from the area, and ironwood trees on the site are either dead or in very poor condition. It is likely that the area supported a

more extensive stand of ironwood trees in the recent past, but the species has apparently declined locally as a result of the construction of the freeway and the associated levees in the 1960s.

The site is located within USFWS-designated Critical Habitat for the desert tortoise (*Gopherus agassizii*) and is located within the Chuckwalla DWMA/ACEC and a BLM-designated Category I area for tortoise. A focused survey for tortoise following established USFWS protocols was conducted on the site in May 2009. No desert tortoises were observed during the focused survey. However, sign of desert tortoise including scat and potential burrows was observed on the project site and within adjacent areas where belt transects were conducted. Due to the occurrence of desert tortoise sign, the project site was determined to be occupied by desert tortoise. However, the proposed action is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17). All terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be required to be followed during construction activities at this site.

No other Federally-listed species occur within the project site boundaries. Additional information relating to wildlife and botany on the project site can be found in the Biological Resources Assessment for the site, located in Appendix B of this EA.

4.2.4 – Cultural Resources

An existing literature review and records search was conducted for the Corn Springs Communication Site APE, and for all lands within one mile of the proposed tower. The APE was defined by considering the finite Corn Springs tower site with a 300-foot buffer extending in every direction to account for potential indirect impacts or minute changes to tower placement. The records search was initially conducted at the Eastern Information Center located at the University of California, Riverside on May 7, 2007, and was subsequently updated on January 17, 2008.

The records search indicated that there were no known and recorded cultural resources located within or adjacent to the APE, and that the APE had not been previously surveyed for the presence or absence of cultural resources. Portions of the lands within one mile of the project site had been assessed under six separate studies, and these studies collectively identified two prehistoric-age resources (CA-RIV-14177 and CA-RIV-13591). Both of these previously recorded resources are found more than 0.5 mile from the APE.

A Class III intensive pedestrian survey was conducted for the entire APE by a project archaeologist on June 26, 2007. The survey area encompassed approximately 6.5-acres. During the pedestrian survey, no previously undetected cultural resources were observed within or adjacent to the APE.

Additional information regarding the assessment of this project site, including a detailed outline of the affected environment can be found in Appendix C.4 of the Cultural Resources Assessment, included as Appendix C of this EA.

4.2.5 – Visual Resources

The Corn Springs Communication Site is located in a flat valley area immediately adjacent to I-10. The area is typical of the valley portions of the Basin and Range Physiographic Province of the southwestern U.S. Broad valley areas are separated by abrupt mountain masses protruding from the valley floor. Vegetation is sparse, and is typical of the Lower Colorado River subdivision of the Sonoran Desert.

The majority of viewers can see the site as they travel in either direction along I-10. The dominant visual features of the site and its surrounding area is the existing communication site immediately adjacent to the project site, the high-tension transmission lines south of the site, and the I-10 freeway. Open desert is present in all directions, but views are interrupted by these features. See Appendix A of this EA for site photographs that present a visual overview of the site and the surrounding area.

The Corn Springs project site is located on BLM lands that have not been assigned formal VRM classifications through the RMP process. Where no formal VRM classes have been assigned, it is BLM policy that interim visual management objectives be assigned, consistent with the guidelines provided in BLM Manual 8410.

An interim classification was established for the project site by the BLM as part of the analysis undertaken during preparation of the EIR/EIS for the Devers-Palo Verde No. 2 Transmission Line Project. During the VRM assessment stage of the Devers-Palo Verde project, VRM classifications were established for areas extending several miles on either side of the proposed transmission line corridor, which roughly paralleled I-10 from the Colorado River to the Devers substation north of Palm Springs. The proposed Corn Springs Communication Site is within one of the areas that were classified during this process. The site area was assigned a VRM classification of Class 3. Management objectives for areas within this class are to partially retain the existing character of the landscape, and the level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer, and changes should repeat the basic elements found in the predominant view of the characteristic landscape.

4.3 – Road 177 Communication Site

4.3.1 – Area Description

The site is located in a rural desert area of the Palen Valley approximately 400 feet west of SR-177 and 15 miles north of Desert Center. A recently constructed 100-foot monopole communication tower lies between the site and the highway. A gravel-surfaced service road forms the northern boundary of the site. The road begins at SR-177 approximately 400 feet east of the site, and travels west approximately

2.5 miles to the Colorado River Aqueduct and the intake to the aqueduct's Coxcomb Tunnel. A single-pole utility line runs parallel to SR-177 from the south before turning and running parallel to the service road, heading west. The Coxcomb Mountains lie approximately two miles to the west of the site, and the Palen Mountains lie across the Palen Valley approximately 10 miles to the east.

The site received some level of disturbance during the construction of the adjacent communication tower in the second half of 2007. The site was evidently used as a staging and/or parking area during construction. However, even though there has been some level of soil disturbance, the vegetation on the site remains largely intact. See Appendix A of this EA for site photographs and an overview of the site and its location.

4.3.2 – Land Use Plan Designation/Classification

The site is located within the NECO planning area of the CDCA, and is managed from the Palm Springs-South Coast Field Office. The area is subject to the planning criteria established in the NECO CMP. Under the plan the site is designated as Multiple Use Class L (Limited Use). Lands classified as Class L are intended to be managed in a manner that provides for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished. New communication sites are allowable within Class L lands. NEPA requirements must be met, and a 30-day public comment period is required for EAs of communication systems of three or more sites.

4.3.3 – Wildlife and Botany

The site is vegetated by plant species typical of the Lower Colorado River subdivision of the Sonoran Desert. The dominant perennial plants in the vicinity include creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), and brittlebush (*Encelia farinosa*). Limited quantities of Sahara mustard (*Brassica tournefortii*) is also present. Vegetation is very widely spaced. Soils consist primarily of rocky, silty sand, and drainage appears to occur entirely by sheetflow. A number of small mammal burrows are present on the site, and are probably occupied or used by wildlife typical for this habitat type, such as kangaroo rat (*Dipodomys* sp.) and zebra-tailed lizard (*Callisaurus draconoides*).

The site is not located within USFWS-designated Critical Habitat for the desert tortoise (*Gopherus agassizii*) or a DWMA/ACEC. However, suitable habitat for tortoise such as appropriate soils and vegetation is present on and around the project site. Therefore, a focused tortoise survey was performed in May 2008 using USFWS survey protocols. One, marginally suitable burrow (Class 4) was observed within the 600-foot ZOI transect belt. It is unknown if the burrow was constructed by tortoise or by more common rabbit or ground squirrel species. The burrow is currently unoccupied and has long been abandoned. The survey found no other evidence of tortoise (live animals, carcasses, scat, etc.) upon the site or within the ZOI. Based on the results of the survey, it can be assumed that tortoise are not present on the site. Regardless, the proposed action is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino

Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be required to be followed during construction activities at this site.

No other Federally-listed species occur within the project site boundaries. Additional information relating to wildlife and botany on the project site can be found in the Biological Resources Assessment for the site, located in Appendix B of this EA.

4.3.4 – Cultural Resources

An existing literature review and records search was conducted for the Road 177 Communication Site APE, and for all lands within one mile of the proposed tower. The APE was defined by considering the finite Road 177 tower site with a 300-foot buffer extending in every direction to account for potential indirect impacts or minute changes to tower placement. The records search was conducted at the Eastern Information Center located at the University of California, Riverside on May 22, 2007.

The records search indicated that there were no known and recorded cultural resources located within or adjacent to the APE. In addition, neither the APE nor any portion of the search radius had been previously surveyed for the presence or absence of cultural resources. Based upon these results, known and recorded cultural resources are not present within the APE or within one mile in any direction.

A Class III intensive pedestrian survey was conducted for the entire APE by a project archaeologist on June 26, 2007. The survey area encompassed approximately 6.5 acres. During the pedestrian survey, one previously undetected cultural resource was observed and recorded within the APE (33-16934). This resource is found to the northwest of the proposed candidate, and was recorded as an historic-age isolated find consisting of a solder-dot can and a whiteware ceramic teacup fragment. This resource is recommended as not eligible for the NRHP.

Additional information regarding the assessment of this project site, including a detailed outline of the affected environment can be found in Appendix C.4 of the Cultural Resources Assessment, included as Appendix C of this EA.

4.3.5 – Visual Resources

The Road 177 Communication Site is located in a flat valley area immediately adjacent to SR-177. The area is typical of the valley portions of the Basin and Range Physiographic Province of the southwestern U.S. Broad valley areas are separated by abrupt mountain masses protruding from the valley floor. Vegetation is sparse, and is typical of the Lower Colorado River subdivision of the Sonoran Desert.

The majority of viewers see the site while traveling in either direction along SR-177. The dominant visual features of the site and its surrounding area is the existing communication site immediately adjacent to the project site, as well as the utility poleline running along SR-177, and westward to the Coxcomb

Mountains. Open desert is present in all directions, but views are interrupted by these features. See Appendix A of this EA for site photographs and a pictorial overview of the site and its location.

The Road 177 project site is located on BLM lands that have not been assigned formal VRM classifications through the RMP process. Where no formal VRM classes have been assigned, it is BLM policy that interim visual management objectives be assigned, consistent with the guidelines provided in BLM Manual 8410.

An interim classification was established for the project site by the BLM as part of the analysis undertaken during preparation of the EA for the Vista Towers Communications Use Lease (EA Number CA-660-06-41) immediately adjacent to the project site. The proposed Road 177 Communication Site is within the area classified. The site area was assigned a VRM classification of Class 3. Management objectives for areas within this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer, and changes should repeat the basic elements found in the predominant view of the characteristic landscape.

4.4 – Vidal Junction Communication Site

4.4.1 – Area Description

The site is located in a rural desert area 250 feet south of SR-62, approximately 5 miles east of Vidal Junction, and 12 miles west of the Colorado River. An existing 70-foot lattice-style self-supporting communication tower is located between the project site and SR-62. The Colorado River Aqueduct lies approximately 0.5 mile north of SR-62, and the Whipple Mountains lie approximately 4 miles further north. From the site, the land slopes gently to the south as part of the Vidal Valley, which continues southward approximately 8 miles to the floodplain of the Colorado River.

The site is located on an area of desert pavement immediately adjacent to the existing communication tower. Owing to the site's proximity to the existing tower, the area is used as a vehicle parking and turnaround area and thus receives regular disturbance. See Appendix A of this EA for site photographs and a pictorial overview of the site and its location.

4.4.2 – Land Use Plan Designation/Classification

The site is located within the NECO planning area of the CDCA, and is managed from the Needles Field Office. The area is subject to the planning criteria established in the NECO CMP. Under the plan the site is designated as Multiple Use Class L (Limited Use). Lands classified as Class L are intended to be managed in a manner that provides for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished. New communication sites are allowable within Class L lands. NEPA requirements must be met, and a 30-day public comment period is required for EAs of communication systems of three or more sites.

4.4.3 – Wildlife and Botany

The site is located in an area of extensive desert pavement, and is essentially devoid of perennial vegetation. The desert pavement on the site is tightly-packed and highly varnished, and thus precludes vegetation growth. The area is also apparently utilized as a vehicle parking and turnaround area for the adjacent communication site, which would appear to further inhibit the establishment of perennial plants. Some vegetation is present within the peripheral areas outside of the site, especially within the shallow and poorly-defined drainages in the area, but this vegetation is relatively sparse. Species in these areas include creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), and brittlebush (*Encelia farinosa*). A number of small palo verde trees (*Cercidium* sp.) and catclaw bushes (*Acacia greggii*) occur further away from the site. The site itself, however, is essentially devoid of vegetation.

The site is located within USFWS-designated Critical Habitat for the desert tortoise (*Gopherus agassizii*), but has not been designated a DWMA/ACEC. A focused desert tortoise survey was performed in May 2008 using USFWS survey protocols. The survey found no evidence of tortoise (live animals, remains, scat, burrows, etc.) upon the site or within the ZOI. Based on the results of the survey, it can be assumed that tortoise are not present on the site. Regardless, the proposed action is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be required to be followed during construction activities at this site.

No other Federally-listed species occur within the project site boundaries. Additional information relating to wildlife and botany on the project site can be found in the Biological Resources Assessment for the site, located in Appendix B of this EA.

4.4.4 – Cultural Resources

An existing literature review and records search was conducted for the Vidal Junction Communication Site APE, and for all lands within one mile of the proposed tower. The APE was defined by considering the finite Vidal Junction tower site with a 300-foot buffer extending in every direction to account for potential indirect impacts or minute changes to tower placement. The records search was conducted at the Archaeological Information Center located at the San Bernardino County Museum in Redlands on January 18, 2008. The BLM Needles Field Office additionally supplied records search data on February 27, 2008.

The records search indicated that there were no known and recorded cultural resources located within or adjacent to the APE, and that the APE had not been surveyed for the presence or absence of cultural resources. One study has been conducted within one mile of the project site, and this study assessed the lands adjacent to the proposed Vidal Junction Communication Site with negative results. Three cultural resources have been recorded within one mile of the project site, including one prehistoric-age resource,

one historic-age resource, and one resource of an unknown age, either prehistoric or historic. The prehistoric-age resource (CA-SBR-1168) and the historic-age resource (CA-SBR-10521) are found more than 0.25 mile from the site, while the resource of an unknown age (CA-SBR-2875) is situated more than 0.5 mile from the APE.

A Class III intensive pedestrian survey was conducted for the entire APE by a project archaeologist on February 29, 2008. The survey area encompassed approximately 6.5 acres. During the pedestrian survey, no previously undetected cultural resources were observed within or adjacent to the APE.

Additional information regarding the assessment of this project site, including a detailed outline of the affected environment can be found in Appendix C.4 of the Cultural Resources Assessment, included as Appendix C of this EA.

4.4.5 – Visual Resources

The Vidal Junction Communication Site is located in a flat valley area immediately adjacent to SR-62. The area is typical of the valley portions of the Basin and Range Physiographic Province of the southwestern U.S. Broad valley areas are separated by abrupt mountain masses protruding from the valley floor. Vegetation is sparse, and is typical of the Lower Colorado River subdivision of the Sonoran Desert.

Most viewers see the site while traveling in either direction along SR-62. The dominant visual features of the site and its surrounding area is the existing communication site immediately adjacent to the project site, as well as the poleline running along SR-62. Open desert is present in all directions, but views are interrupted by these features. See Appendix A of this EA for site photographs and a pictorial overview of the site and its location.

The Vidal Junction Communication Site is located on public lands that have not been assigned formal VRM classifications through the RMP process. Where no formal VRM classes have been assigned, it is BLM policy that interim VRM objectives be established, consistent with the guidelines provided in BLM Manual 8410 and using the VRM analytical system. Since an interim classification has not been assigned to the Vidal Junction Communication Site project area, an interim classification for the site will be established as part of this EA and is provided below. The corresponding VRM data sheets are included in Appendix D of this EA.

The VRM system is an analytical process that identifies, sets, and meets objectives for maintaining scenic values and visual quality. It functions in two ways. First, lands are evaluated and assigned management classifications. Management classes describe the different degrees of modification allowed to the basic elements of the landscape. Second, when development is proposed, the degree of contrast between the proposed activity and the existing landscape is measured. This value is referred to as the Contrast Rating. The visual inventory evaluation is provided below and the assignment of a Contrast Rating for this site is described in the Environmental Consequences section of this EA (Section 5).

Scenic Quality

Scenic quality is a measure of the visual appeal of a tract of land. In the visual resource inventory process, public lands are given an A, B, or C rating based on the apparent scenic quality which is determined using seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. The Scenic Quality Field Inventory Form (BLM Form 8400-1) is included in Appendix D of this EA, and a summary is provided below.

- 1) **Landform:** The site is located on a mildly sloping portion of Vidal Valley, with few interesting landscape features (Score: 1).
- 2) **Vegetation:** There is little variety of vegetation, with only one or two major types with little contrast (Score: 1).
- 3) **Water:** Absent (Score: 0).
- 4) **Color:** The area contains only subtle color variations, contrast, or interest, and is generally comprised of mute tones (Score: 1).
- 5) **Adjacent Scenery:** The Whipple Mountains to the north (approximately 4 miles distant) and the open nature of the Vidal Valley moderately enhance overall visual quality (Score: 3).
- 6) **Scarcity:** The site is interesting within its setting, but is fairly common to the region (Score: 1).
- 7) **Cultural Modifications:** The site is immediately adjacent to SR-62, an existing communication facilities, and an adjacent powerline. These features add little variety, and introduce no substantially discordant elements (Score: 0).

Scenic Quality Score: 7. In accordance with BLM Manual 8410, a scenic quality score of 11 or less yields an overall scenic quality rating of “C.”

Viewer Sensitivity

Although landscapes have common elements that can be measured, there is still a subjective dimension to landscape aesthetics. Each viewer has perceptions about visual quality that are formed by individual influences, culture, visual training, familiarity with local geography, and personal values. In essence, sensitivity levels are a measure of public concern for scenic quality. Factors to consider in a sensitivity level analysis are the types of users, amount of use, public interest, adjacent land uses, and special areas. The Sensitivity Level Rating Sheet (BLM Form 8400-6) is included in Appendix D of this EA, and the analysis is discussed in detail below.

- 1) **Types of Users:** Predominantly users of SR-62, which includes both recreational and commercial traffic. In general, the former type is more sensitive to changes in visual quality than the latter (High).
- 2) **Amount of Use:** Moderate to large numbers of people using SR-62 would see the project. Protection of visual resources usually becomes more important as the number of viewers increase (Moderate).
- 3) **Public Interest:** The proposed project occurs within the CDCA), established by Congress through Public Law 94-579, October 21, 1976. Congress found that the California desert contains scenic resources that are uniquely located adjacent to an area of large population. Therefore, it is reasonable to conclude that public interest in visual quality of the CDCA is high (High).
- 4) **Adjacent Land Uses:** The project site is located in a very rural area and would not be visible from residential areas where sensitivities to visual changes would be great. It is also not near any designated Wilderness Areas, National Parks, or similar land uses where visual changes would be of heightened concern (Low).
- 5) **Special Areas:** The project site is not located within a special area other than the CDCA, as indicated above (Low).

Viewer Sensitivity: The area considered during the sensitivity analysis is easily observable from SR-62, which is a travel route with a moderate to high level of use. Many of these users are recreational and are comparatively more sensitive to changes in visual quality. Considering the level of use, in conjunction with the potential for recreational viewers, as well as the location of the area within the CDCA, the viewer sensitivity level is considered “high.”

Distance Zone

The visual quality of a landscape and user reaction may be magnified or diminished by the visibility of the landscape from major viewing routes and key observation points. The proposed project is located within the foreground-middle ground zone, which includes areas seen from highways or other viewing locations which are less than 3 to 5 miles away.

VRM Summary and Assignment of Interim Classification

In accordance with BLM Manual 8410, public lands assigned a visual quality rating of “C,” a viewer sensitivity level of “high,” and a “foreground-middle ground” distance zone, and where no special area has been designated for which the current management situation requires maintaining a natural environment essentially unaltered by man, are designated as VRM Class 3. The management objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not

dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant features of the characteristic landscape.

4.5 – Whitewater Communication Site

4.5.1 – Area Description

The Whitewater Communication Site is an existing County communication facility that has been operating under a BLM lease for many years. The site is part of a larger communication site complex within the San Gorgonio Pass “windmill farm,” approximately one mile northwest of the I-10 and SR-62 junction. Several hundred large wind turbines are located in this portion of the windmill farm, as well as perhaps a half dozen communication towers. This area is at the eastern end of San Gorgonio Pass at the head of the Coachella Valley, and serves as an important thoroughfare for a number of critical infrastructure elements serving the greater Los Angeles area, including the underground Colorado River Aqueduct, numerous electric transmission lines, the Union Pacific Railroad, several high-pressure gas lines, and I-10.

The existing County facility consists of a 100-foot self-supporting, lattice-style tower and two equipment shelters. One of the shelters is an industry-standard prefabricated unit measuring 11 feet by 27 feet. The other is a concrete block unit measuring 13 feet by 24 feet. Several other communication towers and their associated infrastructure (equipment shelters, powerlines, etc.) are located immediately adjacent to the County facility. The site is accessible via an unimproved dirt road that winds through the windmill farm site. Commercial electric power is available at the site and is supplied via an existing utility poleline.

As a result of the existing operations at the site itself and in the area immediately surrounding it, vegetative cover is minimal and is prone to regular disturbance. See Appendix A of this EA for site photographs and an overview of the site and its location.

4.5.2 – Land Use Plan Designation/Classification

The site is located within the planning area that is managed under the Coachella Valley Amendment (CVA) to the CDCA Plan. The site area is managed from the Palm Springs-South Coast Field Office in Palm Springs. Under the plan the site is designated as Multiple Use Class M (Moderate Use). Lands classified as Class M are intended to be managed in a manner that allows for a controlled balance between higher intensity use and protection of public lands. The class provides for a wide variety of present and future uses such as mining, livestock grazing, recreation, energy, and utility development. The Class M classification is designed to conserve desert resources and to mitigate damage to those resources that permitted uses may cause. New communication sites are allowable within Class M lands, and existing facilities may be maintained in accordance with right-of-way grants and applicable regulations. NEPA requirements must be met, and a 30-day public comment period is required for EAs of communication systems of three or more sites.

4.5.3 – Wildlife and Botany

The site is vegetated by plant species typical of the Lower Colorado River subdivision of the Sonoran Desert. The dominant perennial plants in the vicinity include creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Significant quantities of Sahara mustard (*Brassica tournefortii*) is also present. Vegetation is very widely spaced. Soils consist primarily of cobbly fine sandy loam. The area is subject to regular disturbance associated with regular maintenance of the wind farm turbines and the existing communication facilities.

The site is not located within USFWS-designated Critical Habitat for the desert tortoise (*Gopherus agassizii*) or within a DWMA/ACEC. However, suitable habitat for tortoise such as appropriate soils and vegetation is present on and around the project site. Therefore, a focused tortoise survey was performed in May 2008 using USFWS survey protocols. The survey found no evidence of tortoise (live animals, carcasses, scat, burrows, etc.) upon the site or within the ZOI. Based on the results of the survey, it can be assumed that tortoise are not present on the site. Regardless, the proposed action is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be required to be followed during construction activities at this site.

No other Federally-listed species occur within the project site boundaries. Additional information relating to wildlife and botany on the project site can be found in the Biological Resources Assessment for the site, located in Appendix B of this EA.

4.5.4 – Cultural Resources

An existing literature review and records search was conducted for the Whitewater Communication Site APE, and for all lands within one mile of the proposed tower. The APE was defined by considering the finite Whitewater tower site with a 300-foot buffer extending in every direction to account for potential indirect impacts or minute changes to tower placement. The records search was conducted at the Eastern Information Center located at the University of California, Riverside on April 16, 2007.

The records search indicated that there were no known and recorded cultural resources located within or adjacent to the APE, and that the APE had been previously surveyed twice for the presence or absence of cultural resources. These studies were conducted in 1981 (RI-1715) and 1983 (RI-1277) and returned negative results for observable cultural resources within and adjacent to the APE. Portions of the lands within one mile of the project site have been assessed under 13 separate studies, collectively identifying one prehistoric-age resource. This prehistoric-age resource (33-13738) is found more than 0.5 mile from the APE.

A Class III intensive pedestrian survey was conducted for the entire APE by a project archaeologist on July 19, 2007. The survey area encompassed approximately 6.5-acres. During the pedestrian survey, no previously undetected cultural resources were observed within or adjacent to the APE.

Additional information regarding the assessment of this project site, including a detailed outline of the affected environment can be found in Appendix C.4 of the Cultural Resources Assessment, included as Appendix C of this EA.

4.5.5 – Visual Resources

The Whitewater Communication Site is located atop Whitewater Hill, which is a low ridgeline immediately northwest of the I-10/SR-62 interchange. Several hundred large wind turbines are positioned around the site, as well as perhaps a half dozen communication towers. The San Jacinto Mountains lie two miles to the south across I-10, and the foothills of the San Bernardino Mountains lie to the north of the site. Vegetation is sparse, and is typical of the Lower Colorado River subdivision of the Sonoran Desert.

Most viewers see the site as they travel along I-10 and/or SR-62. The dominant visual features of the site and its surrounding area are the extensive wind farm turbines immediately surrounding the site and radiating outward in all directions. The existing communication tower is somewhat dwarfed by the wind turbines, and is virtually unnoticeable when viewed amongst the existing structures.

The CVA has created VRM classifications for lands within its planning area. Under the plan the project site is classified as Class 4. Management objectives for areas within this class is to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. Management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

4.6 – Wileys Well Communication Site

4.6.1 – Area Description

The site is located in the Chuckwalla Valley, southwest of the I-10/Wileys Well interchange, and approximately 18 miles west of Blythe. An existing 150-foot monopole communication tower and three equipment shelters lie immediately north of the site and I-10 lies approximately 0.25 mile further north. The Wileys Well Rest Stop is located immediately north of the freeway, on the far side of the interchange. The McCoy Mountains lie approximately 3 miles northeast of the interchange. Wileys Well Road forms the eastern boundary of the site, and this road continues southward for several miles to the Chuckwalla Valley State prison and further to the Wileys Well Campground and Long Term Visitor Area (LTVA). Immediately south of the site is an older, shallow borrow pit that is now largely overgrown with tamarisk and other vegetation. The borrow pit was presumably used during the construction of the freeway and

interchange in the 1960s. West of the site is open desert. Commercial power is available to the site via a single-pole utility line that runs adjacent and parallel to Wileys Well Road, on the east side of the site.

The site receives regular disturbance as a result of maintenance and operational activities at the adjacent communication site, and the site area appears to be used regularly as a vehicle parking and turnaround area. See Appendix A of this EA for site photographs and an overview of the site and its location.

4.6.2 – Land Use Plan Designation/Classification

The site is located within the NECO planning area of the CDD, and is managed from the Palm Springs-South Coast Field Office. The area is subject to the planning criteria established in the NECO CMP. Under the plan the site is designated as Multiple Use Class L (Limited Use). Lands classified as Class L are intended to be managed in a manner that provides for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished. New communication sites are allowable within Class L lands. NEPA requirements must be met, and a 30-day public comment period is required for EAs of communication systems of three or more sites.

4.6.3 – Wildlife and Botany

The site is located in an area of small, moderately stabilized and vegetated sand dunes. The site is vegetated by plant species typical of the Lower Colorado River subdivision of the Sonoran Desert. The dominant perennial plant in the vicinity is widely-spaced creosote bush (*Larrea tridentata*). Limited quantities of Sahara mustard (*Brassica tournefortii*) is also present. A number of small mammal burrows are present on the site, and are probably occupied or used by wildlife typical for this habitat type, such as kangaroo rat (*Dipodomys* sp.) and zebra-tailed lizard (*Callisaurus draconoides*). The borrow pit to the south of the site supports a dense grove of tamarisk (*Tamarix* sp.), and limited occurrences of honey mesquite (*Prosopis glandulosa*) and creosote bush.

The site is located within USFWS-designated Critical Habitat for the desert tortoise (*Gopherus agassizii*) and is within the Chuckwalla DWMA/ACEC. A focused desert tortoise survey was performed in May 2008 following USFWS survey protocols. The survey found no evidence of tortoise (live animals, remains, scat, burrows, etc.) upon the site or within the ZOI. Based on the results of the survey, it can be assumed that tortoise are not present on the site. Regardless, the proposed action is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be required to be followed during construction activities at this site.

No other Federally-listed species occur within the project site boundaries. Additional information relating to wildlife and botany on the project site can be found in the Biological Resources Assessment for the site, located in Appendix B of this EA.

4.6.4 – Cultural Resources

An existing literature review and records search was conducted for the Wileys Well Communication Site APE, and for all lands within one mile of the proposed tower. The APE was defined by considering the finite Wileys Well tower site with a 300-foot buffer extending in every direction to account for potential indirect impacts or minute changes to tower placement. The records search was conducted at the Eastern Information Center located at the University of California, Riverside on April 23, 2007.

The records search indicated that there were no known and recorded cultural resources located within or adjacent to the APE, and that the APE had been previously surveyed twice for the presence or absence of cultural resources. These studies were conducted in 1980 (RI-0982) and 1990 (RI-4082) and returned negative results for observable cultural resources within the APE. Portions of the lands within one mile of the project site had been assessed under 11 separate studies, providing an inventory of several hundred acres adjacent to the APE, as well as a significant percentage of the total search radius. Collectively, these studies identified eight prehistoric-age resources and two historic-age resources. These previously recorded prehistoric-age and historic-age resources (CA-RIV-259; -260; -1266; -3807; -3808; -3809; -3810; and 33-8578; -13655; -13656) are found more than 0.25 mile from the APE.

A Class III intensive pedestrian survey was conducted for the entire APE by a project archaeologist on June 26, 2007. The survey area encompassed approximately 6.5-acres. During the pedestrian survey, no previously undetected cultural resources were observed within or adjacent to the APE.

Additional information regarding the assessment of this project site, including a detailed outline of the affected environment can be found in Appendix C.4 of the Cultural Resources Assessment, included as Appendix C of this EA.

4.6.5 – Visual Resources

The Wileys Well Communication Site is located in a flat valley area immediately adjacent to I-10. The area is typical of the valley portions of the Basin and Range Physiographic Province of the southwestern U.S. Broad valley areas are separated by abrupt mountain masses protruding from the valley floor. Vegetation is sparse, and is typical of the Lower Colorado River subdivision of the Sonoran Desert.

The majority of viewers see the site as they travel in either direction along I-10. The dominant visual features of the site and its surrounding area is the existing communication site immediately adjacent to the project site, the high-tension transmission lines south of the site, and the I-10 freeway interchange. Open desert is present in all directions, but views are interrupted by these features. See Appendix A of this EA for site photographs and a pictorial overview of the site and its location.

The Wileys Well project site is located on BLM lands that have not been assigned formal VRM classifications through the RMP process. Where no formal VRM classes have been assigned, it is BLM

policy that interim visual management objectives be assigned, consistent with the guidelines provided in BLM Manual 8410.

An interim classification was established for the project site by the BLM as part of the analysis undertaken during preparation of the EIR/EIS for the Devers-Palo Verde No. 2 Transmission Line Project. During the VRM assessment stage of the Devers-Palo Verde project, VRM classifications were established for areas extending several miles on either side of the proposed transmission line corridor, which roughly paralleled I-10 from the Colorado River to the Devers substation north of Palm Springs. The proposed Wileys Well Communication Site is within one of the areas that were classified during this process. The site area was assigned a VRM classification of Class 3. Management objectives for areas within this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer, and changes should repeat the basic elements found in the predominant view of the characteristic landscape.

SECTION 5: ENVIRONMENTAL CONSEQUENCES

Table 3 lists the potential effects to various elements of the human environment, including the “critical elements” listed in BLM Manual H-1790-1. Table 3 also summarizes the potential effects of the project in relation to the Proposed Action and the No Action Alternative. Elements for which there are no identified effects will not be assessed further in this document.

Table 3: Critical Elements

Environmental Element	Proposed Action	No Action Alternative
Air Quality	No effect	No effect
Areas of Critical Environmental Concern (ACEC)/Desert Wildlife Management Units (DWMA)	May effect, but will not adversely affect, as mitigated	No effect
Cultural Resources	May effect, but will not adversely affect, as mitigated	No effect
Native American Concerns	No effect	No effect
Farmlands	Not applicable	No effect
Floodplains	Not applicable	No effect
Energy (Executive Order 13212)	Not applicable	No effect
Minerals	Not applicable	No effect
Threatened and & Endangered Animal Species	May effect, but will not adversely affect, as mitigated	No effect
T&E Plant Species	Not applicable	No effect
Invasive, Nonnative Species	No effect	No effect
Wastes (hazardous/solid)	Not applicable	No effect
Water Quality (surface and ground)	No effect	No effect
Wetlands/Riparian Zones	Not applicable	No effect
Wild and Scenic Rivers	Not applicable	No effect
Wilderness	Not applicable	No effect
Environmental Justice	Not applicable	No effect
Health and Safety Risks to Children	No effect	No effect
Visual Resource Management	Conforms to appropriate BLM VRM Class objectives	No effect

5.1 – Chuckwalla Communication Site

5.1.1 – ACECs and DWMA's

The Chuckwalla Communication Site is located within the Chuckwalla DWMA/ACEC. However, it is also located within an existing communication site complex for which a Communication Site Management Plan has been adopted. This management plan contains a number of operational requirements related to the site's presence within a DWMA/ACEC. The operational requirements are designed to avoid or minimize any effects that could arise from operations within the DWMA/ACEC.

Since the undertaking at the Chuckwalla Communication Site will not involve the disturbance of additional lands or increase the present footprint of the existing facility, the mitigation fee requirements normally imposed on projects within a DWMA/ACEC do not apply to this site. However, other requirements relating to avoiding impacts to desert tortoise should be implemented during construction activities of the site. Further discussion relating to these measures can be found in Section 7.0 of this EA. Compliance with these measures allows for the determination that the undertaking may effect, but will not adversely affect, DWMA's/ACEC's, as mitigated.

5.1.2 – Wildlife and Botany

Although the project site is within Critical Habitat for desert tortoise, the site is fully developed and the Primary Constituent Elements (PCEs) required to support desert tortoise are not present. Based on these site characteristics, it can be assumed that desert tortoise does not occur within the project site so focused surveys were not conducted. Due to the disturbed nature of the site, impacts to sensitive wildlife and/or plant species are not expected to occur. Regardless, this undertaking is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, must be followed during construction activities at the site.

5.1.3– Cultural Resources

The results of the records searches and the Class III intensive pedestrian survey indicate that no known or recorded cultural resources are located within the Chuckwalla Communication Site APE for this undertaking. These negative findings for cultural resources are consistent with an earlier archaeological survey report conducted in 2003 for the APE. In addition, no known or recorded cultural resources are located within one mile of the proposed communication site.

This undertaking will not adversely affect any known or recorded cultural resources within the APE, including Historic Properties, defined as cultural resources included in or eligible for inclusion in the NRHP. Additionally, the construction of the proposed communication site does not negatively impact the current viewshed as it relates to known Historic Properties. Thus, this undertaking will have no effect on Historic Properties.

5.1.4 – Visual Resources

Visual simulation renderings were not prepared for this site. This is due to the fact that the proposed undertaking will simply replace the existing 80-foot lattice-style self-supporting tower with a tower of similar style and function. As such, it can be assumed that the undertaking will not result in a substantial change to the existing visual environment. Therefore, a finding of no effect is appropriate for the Chuckwalla Communication Site in regards to impacts to visual resources.

5.1.5 – Residual Impacts

The project facilities, as well as the other communication facilities located at the Chuckwalla Mountain Communication Site, will continue to be visible from observation points in the area. However, the area has already been impacted by the ongoing communication facility operations at the site, and the proposed action would neither decrease nor increase the intensity of use or disturbance that is already occurring. Therefore, the level of residual impacts would remain the same as those that have already taken place, including the permanent loss of approximately 0.23 acre of creosote scrub along with its plants and wildlife.

5.2 – Corn Springs Communication Site

5.2.1 – ACECs and DWMA

The Corn Springs Communication Site is located on the extreme northern periphery of the Chuckwalla DWMA/ACEC, approximately 200 feet from the DWMA/ACEC boundary. Actions such as the proposed undertaking may be authorized within DWMA/ACEC areas so long as they conform with maximum disturbance thresholds and a number of mitigation measures related to the desert tortoise. In addition, a mitigation fee in an amount that achieves a ratio of 5 acres of compensation land for every 1 acre disturbed must be paid. Thus, it can be determined that the undertaking may effect, but will not adversely affect, DWMA's/ACEC's, as mitigated. Further discussion relating to mitigation measures can be found below in Section 5.2.2 and Section 7.0 of this EA.

5.2.2 – Wildlife and Botany

The project site is within Critical Habitat for desert tortoise and suitable habitat to support the species occurs on the site. However, this undertaking is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be followed. Losses to this Critical Habitat will be mitigated by compliance with existing mitigation measures required for development under the BO. Thus, this undertaking will effect, but not adversely affect sensitive species, as mitigated.

5.2.3 – Cultural Resources

The results of the records searches and the Class III intensive pedestrian survey indicate that no known or recorded cultural resources are located within the Corn Springs Communication Site APE for this undertaking. In addition, the closest known or recorded cultural resources are located more than 0.5 mile from the proposed communication site. These known resources will not be impacted by the undertaking.

This undertaking will not adversely affect any known or recorded cultural resources, including Historic Properties, defined as cultural resources included in or eligible for inclusion in the NRHP. Additionally, the construction of the proposed communication site does not negatively impact the current viewshed as it relates to known Historic Properties. Thus, this undertaking will have no effect on Historic Properties.

5.2.4 – Visual Resources

The basic philosophy underlying the visual quality of a landscape depends on the visual contrast created between a project and the existing landscape. The contrast can be measured by comparing the project features with the major features in the surrounding landscape. The contrast rating evaluation should be conducted from the most critical viewpoint(s). These are usually along commonly traveled routes or at other likely observation points. Accordingly, the visual simulation rendering prepared for the Corn Springs Communication Site was created as if a viewer were observing the site while traveling west-bound on I-10, approximately 0.25 mile from the project site. Viewers traveling east-bound on I-10 and observing the project site from the same distance would experience a very similar view. These individual site exhibits are located in Appendix D of this EA.

The simulated rendering of the proposed Corn Springs Communication Site allows for a reasonable comparison of the visual environment both “before” and “after” project implementation. It also allows for an accurate evaluation as to the degree of contrast that would be created by the undertaking. This evaluation and the assignment of a contrast rating is based on information contained in the Visual Contrast Rating Worksheet (BLM Form 8400-4), and included in Appendix D of this EA. The contrast rating and a summary of the worksheet data for the proposed communication site is provided below.

Contrast Rating

A contrast evaluation for the undertaking reveals that the degree of contrast would be weak. This is based primarily on the small scope of the project, the presence of other cultural modifications near the site (most notably the existing 150-foot monopole communication tower, nearby powerlines, and I-10), and close proximity of the project to the freeway. The predominant contrast would be the vertical lines established by the new 100-foot tower viewed against the irregular horizontal line of the background horizon to the west. Depending on the angle of view, the tower may be seen extending above the horizon. However, the existing 150-foot monopole tower immediately adjacent is substantially taller than the proposed lattice-style tower. In fact, the height and mass of the existing tower somewhat overpowers the finer lines of the proposed tower.

For short durations of time as passersby travel I-10, the tower and associated facilities may attract the attention of the casual observer. However, the vertical line established by the tower would not be sufficiently bold to dominate the characteristic landscape. The 8-foot chain link fence and other structures at the site may also attract attention of travelers on I-10 for a short period of time, but would not likely be perceived as dominating the observer's view. Each of these factors suggests that an appropriate contrast rating for the proposed communication tower would be "weak."

As was noted in the Affected Environment analysis for the Corn Springs site presented in Section 4.2.5 of this EA, the interim VRM classification for this site is Class 3. According to BLM Manual 8410, when the degree of contrast is weak, a project can be seen and may attract attention, but should not dominate the view of the casual observer. A contrast rating of "weak" for the undertaking is consistent with VRM objectives for Class 3 areas. Thus, this undertaking has no effect on visual resources.

5.2.5 – Residual Impacts

Approximately 0.23 acre of creosote scrub would be permanently lost along with its plants and wildlife. The project facilities, along with the existing adjacent communication facility and other communication facilities along I-10, would be visible from observation points in the area.

5.3 – Road 177 Communication Site

5.3.1 – ACECs and DWMA

The Road 177 Communication Site is not located within an ACEC or a DWMA, so this issue does not apply to this site.

5.3.2 – Wildlife and Botany

The project site is not within Critical Habitat for desert tortoise, though suitable habitat to support the species does occur on the site. However, a focused survey conducted in May 2008 found no sign of tortoise on the site or within the ZOI (see Appendix B). The project site is within Critical Habitat for desert tortoise and suitable habitat to support the species occurs on the site. However, this undertaking is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be followed. Losses to this Critical Habitat will be mitigated by compliance with existing mitigation measures required for development under the BO. Thus, this undertaking will effect, but not adversely affect sensitive species, as mitigated.

Based on these findings, it can be assumed that tortoise do not occur on the site and that no impacts to the species will occur as a result of the undertaking. However, since suitable habitat does occur on the site and in the surrounding area, other requirements relating to avoiding impacts to desert tortoise should be implemented during construction activities of the site. Further discussion relating to these measures can

be found in Section 7.0 of this EA. Thus, this undertaking will have no effect on sensitive species, as mitigated.

5.3.3 – Cultural Resources

The results of the records searches indicate that no known and recorded cultural resources are known within the Road 177 Communication Site APE, or within one mile in any direction. However, the Class III intensive pedestrian survey indicated that one previously undetected cultural resource is located within the APE for this undertaking. This resource is found to the northwest of the proposed finite candidate location, and is an historic-age isolated find consisting of a solder-dot can and a whiteware ceramic fragment. This resource was recorded onto a DPR 523 Isolate form, which was subsequently submitted to the Eastern Information Center (EIC) for the assignment of a permanent identification number. The EIC has assigned Primary Number 33-16934 to this resource.

In the case of most isolated cultural resources, the lack of artifact content and context and the absence of interpretive data cannot meet the minimal requirements of the NRHP eligibility criteria. This renders the majority of all isolated resources ineligible for listing in the NRHP. 33-16934 cannot meet the minimal requirements of the NRHP eligibility criteria, in that the resource does not possess integrity of form, location, setting, materials, workmanship, feeling, and/or association and is not historically significant. Thus, 33-16934 is recommended as not eligible for the NRHP.

This undertaking will not adversely affect any Historic Properties, defined as cultural resources included in or eligible for inclusion in the NRHP. Additionally, the construction of the proposed communication site does not negatively impact the current viewshed as it relates to known Historic Properties. Thus, this undertaking will have no effect on Historic Properties.

5.3.4 – Visual Resources

The basic philosophy underlying the visual quality of a landscape depends on the visual contrast created between a project and the existing landscape. The contrast can be measured by comparing the project features with the major features in the surrounding landscape. The contrast rating evaluation should be conducted from the most critical viewpoint(s). These are usually along commonly traveled routes or at other likely observation points. Accordingly, the visual simulation rendering prepared for the Road 177 Communication Site was created as if a viewer were observing the site while traveling north-bound on SR-177, approximately 0.25 mile from the project site. Viewers traveling south-bound on SR-177 and observing the project site from the same distance would experience a very similar view. The visual simulation renderings are located in Appendix D of this EA.

The simulated rendering of the proposed Road 177 Communication Site allows for a reasonable comparison of the visual environment both “before” and “after” project implementation. It also allows for an accurate evaluation as to the degree of contrast that would be created by the proposed undertaking. This evaluation and the assignment of a contrast rating is based on information contained in the Visual

Contrast Rating Worksheet (BLM Form 8400-4), and included in Appendix D of this EA. The contrast rating and a summary of the worksheet data for the proposed communication site is provided below.

Contrast Rating

A contrast evaluation for the proposed undertaking reveals that the degree of contrast would be weak to moderate. This is based primarily on the small scope of the project, the presence of other cultural modifications near the site (most notably the existing 150-foot monopole communication tower, nearby powerlines, and SR-177), and close proximity of the project to the highway. The predominant contrast would be the vertical lines established by the new 100-foot tower viewed against the irregular horizontal line of the background horizon to the west. Depending on the angle of view, the tower may be seen extending above the horizon. However, the existing 150-foot monopole tower immediately adjacent is substantially taller than the proposed lattice-style tower. At certain times of the day, the height and mass of the existing tower somewhat overpowers the finer lines of the proposed tower.

For short durations of time as passersby travel SR-177, the tower and associated facilities may attract the attention of the casual observer. However, the vertical line established by the tower would not be sufficiently bold to dominate the characteristic landscape. The 8-foot chain link fence and other structures at the site may also attract attention of travelers on SR-177 for a short period of time, but would not likely be perceived as dominating the observer's view. Each of these factors suggest that an appropriate contrast rating for the proposed communication tower would be "weak" to "moderate."

As was noted in the Affected Environment analysis for the Road 177 site presented in Section 4.3.5 of this EA, the interim VRM classification for this site is Class 3. According to BLM Manual 8410, when the degree of contrast is weak to moderate, a project can be seen and may attract attention, but should not dominate the view of the casual observer. A contrast rating of weak to moderate for the proposed undertaking is consistent with VRM objectives for Class 3 areas. Thus, this undertaking has no effect on visual resources.

5.3.5 – Residual Impacts

Approximately 0.23 acres of creosote scrub would be permanently lost along with its plants and wildlife. The project facilities, along with the existing adjacent communication facility and other communication facilities along SR-177, would be visible from observation points in the area.

5.4 – Vidal Junction Communication Site

5.4.1 – ACECs and DWMA

The Vidal Junction Communication Site is not located within an ACEC or a DWMA, so this issue does not apply to this site.

5.4.2 – Wildlife and Botany

Although the project site is within Critical Habitat for desert tortoise, the site has not been designated a DWMA or ACEC. Suitable habitat to support the species does occur on the site, but a focused survey conducted in May 2008 found no sign of desert tortoise on the site or within the ZOI (see Appendix B). Based on these findings, it can be assumed that tortoise do not occur on the site and that no impacts to the species will occur as a result of the undertaking. Regardless, this undertaking is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be followed. Losses to this Critical Habitat will be mitigated by compliance with existing mitigation measures required for development under the BO. Thus, this undertaking will effect, but not adversely affect sensitive species, as mitigated.

5.4.3 – Cultural Resources

The results of the records searches and the Class III intensive pedestrian survey indicate that no known or recorded cultural resources are located within the Vidal Junction Communication Site APE for this undertaking. In addition, the closest known or recorded cultural resources are located more than 0.25 mile from the proposed communication site. None of these known and recorded resources will be impacted by the undertaking.

This undertaking will not adversely affect any known or recorded cultural resources, including Historic Properties, defined as cultural resources included in or eligible for inclusion in the NRHP. Additionally, the construction of the proposed communication site does not negatively impact the current viewshed as it relates to known Historic Properties. Thus, this undertaking will have no effect on Historic Properties.

5.4.4 – Visual Resources

The basic philosophy underlying the visual quality of a landscape depends on the visual contrast created between a project and the existing landscape. The contrast can be measured by comparing the project features with the major features in the surrounding landscape. The contrast rating evaluation should be conducted from the most critical viewpoint(s). These are usually along commonly traveled routes or at other likely observation points. Accordingly, the visual simulation rendering prepared for the Vidal Junction Communication Site was created as if a viewer were observing the site while traveling west-bound on SR-62, approximately 0.25 mile from the project site. Viewers traveling east-bound on SR-62 and observing the project site from the same distance would experience a very similar view. The visual simulation renderings are located in Appendix D of this EA.

The simulated rendering of the proposed Vidal Junction Communication Site allows for a reasonable comparison of the visual environment both “before” and “after” project implementation. It also allows for an accurate evaluation as to the degree of contrast that would be created by the undertaking. This

evaluation and the assignment of a contrast rating is based on information contained in the Visual Contrast Rating Worksheet (BLM Form 8400-4), and included in Appendix D of this EA. The contrast rating and a summary of the worksheet data for the proposed communication site is provided below.

Contrast Rating

A contrast evaluation for the undertaking reveals that the degree of contrast would be weak to moderate. This is based primarily on the small scope of the project, the presence of other cultural modifications near the site (most notably the existing 70-foot lattice-style, self-supporting communication tower, nearby powerlines, and SR-62), and close proximity of the project to the highway. The predominant contrast would be the vertical lines established by the new 200-foot tower viewed against the irregular horizontal line of the background horizon to the west. Depending on the angle of view, the tower may be seen extending above the horizon. The existing 70-foot self-supporting tower immediately adjacent is substantially less tall than the proposed tower, but the construction of a taller tower would not be inconsistent with the views that have been present in the area for many years. The existing tower appears to be at least two decades old, and regular passersby have no doubt become accustomed to its presence. The addition of another tower, even if it is taller, would be unlikely to substantially change that perception.

For short durations of time as passersby travel SR-62, the tower and associated facilities may attract the attention of the casual observer. However, the vertical line established by the tower would not be sufficiently bold to dominate the characteristic landscape. The 8-foot chain link fence and other structures at the site may also attract attention of travelers on SR-62 for a short period of time, but would not likely be perceived as dominating the observer's view. Each of these factors suggest that an appropriate contrast rating for the proposed communication tower would be "weak" to "moderate."

As was noted in the Affected Environment analysis for the Vidal Junction site presented in Section 4.4.5 of this EA, the interim VRM classification for this site is Class 3. According to BLM Manual 8410, when the degree of contrast is weak to moderate, a project can be seen and may attract attention, but should not dominate the view of the casual observer. A contrast rating of weak to moderate for the undertaking is consistent with VRM objectives for Class 3 areas. Thus, this undertaking has no effect on visual resources.

5.4.5 – Residual Impacts

Approximately 0.23 acre of creosote scrub and desert pavement would be permanently lost along with its plants and wildlife. The project facilities, along with the existing adjacent communication facility and other communication facilities along SR-62, would be visible from observation points in the area.

5.5 – Whitewater Communication Site

5.5.1 – ACECs and DWMA

The Whitewater Communication Site is not located within an ACEC or a DWMA, so this issue does not apply to this site.

5.5.2 – Wildlife and Botany

The project site is not within Critical Habitat for desert tortoise, though suitable habitat to support the species does occur on the site. However, a focused survey conducted in May 2008 found no sign of tortoise on the site or within the ZOI (see Appendix B). Based on these findings, it can be assumed that tortoise do not occur on the site and that no impacts to the species will occur as a result of the undertaking. Regardless, this undertaking is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be followed. Losses to this habitat will be mitigated by compliance with existing mitigation measures required for development under the BO. Thus, this undertaking will effect, but not adversely affect sensitive species, as mitigated.

5.5.3 – Cultural Resources

The results of the records searches and the Class III intensive pedestrian survey indicate that no known or recorded cultural resources are located within the Whitewater Communication Site APE for this undertaking. These negative findings for cultural resources are consistent with earlier archaeological survey reports conducted in 1981 and 1983 for the APE. In addition, the records search indicated that only one known and recorded cultural resource was known within one mile of the proposed communication site, despite numerous surveys. This resource is found more than 0.5 mile from the proposed communication site, and will not be impacted by the undertaking.

This undertaking will not adversely affect any known or recorded cultural resources within the APE, including Historic Properties, defined as cultural resources included in or eligible for inclusion in the NRHP. Additionally, the construction of the proposed communication site does not negatively impact the current viewshed as it relates to known Historic Properties. Thus, this undertaking will have no effect on Historic Properties.

5.5.4 – Visual Resources

Visual simulation renderings were not prepared for this site. This is due to the fact that the undertaking will simply replace the existing 100-foot lattice-style self-supporting tower with a tower of similar style and function. As such, it can be assumed that the undertaking will not result in a substantial change to the existing visual environment. The existing prefabricated communication shelter at the site will be removed, and a small addition to the existing concrete block communication shelter unit will be

undertaken. The addition to the concrete block shelter will result in a more consistent architectural style at the site, and the removal of the deteriorated prefabricated shelter will result in an improvement to the overall visual character. Regardless, the proposed undertaking will not result in a substantial adverse change to the existing visual environment at the site. Therefore, there will be no effect to the existing visual environment at the Whitewater Communication Site as a result of the undertaking.

5.5.5 – Residual Impacts

The project facilities, as well as the other communication and wind farm facilities located in the area, will continue to be visible from observation points along I-10 and SR-62. However, the area has already been impacted by the ongoing communication facility operations at the site, and the proposed action would neither decrease nor increase the intensity of use or disturbance that is already occurring. Therefore, the level of residual impacts would remain the same as those that have already taken place, including the permanent loss of approximately 0.23 acre of creosote scrub along with its plants and wildlife.

5.6 – Wileys Well Communication Site

5.6.1 – ACECs and DWMA

The Wileys Well Communication Site is located on the extreme northeastern periphery of the Chuckwalla DWMA/ACEC, immediately adjacent to the DWMA/ACEC boundary. Actions such as the proposed undertaking may be authorized within DWMA/ACEC areas so long as they conform with maximum disturbance thresholds and a number of mitigation measures related to the desert tortoise. In addition, a mitigation fee in an amount that achieves a ratio of 5 acres of compensation land for every 1 acre disturbed must be paid. Thus, it can be determined that the undertaking may effect, but will not adversely affect, DWMA's/ACEC's, as mitigated. Further discussion relating to mitigation measures can be found below in Section 5.6.2 and Section 7.0 of this EA.

5.6.2 – Wildlife and Botany

Although the project site is within Critical Habitat for desert tortoise and suitable habitat to support the species occurs on the site, a focused survey conducted in May 2008 found no sign of desert tortoise on the site or within the ZOI (see Appendix B). Based on these findings, it can be assumed that tortoise do not occur on the site and that no impacts to the species will occur as a result of the undertaking. Regardless, this undertaking is covered by the Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kern, Los Angeles, Riverside, and San Bernardino Counties (Small Projects BO; 1-8-97-F-17), and all terms and conditions of this BO, as reflected in the desert tortoise mitigation measures in Section 7.0 of this EA, will be followed. Losses to this Critical Habitat will be mitigated by compliance with existing mitigation measures required for development under the BO. Thus, this undertaking will effect, but not adversely affect sensitive species, as mitigated.

5.6.3 – Cultural Resources

The results of the records searches and the Class III intensive pedestrian survey indicate that no known or recorded cultural resources are located within the Wileys Well Communication Site APE for this undertaking. These negative findings for cultural resources are consistent with earlier archaeological survey reports conducted in 1980 and 1990 for the APE. In addition, the closest known or recorded cultural resources are located more than 0.25 mile from the proposed communication site. None of the known and recorded resources will be impacted by the undertaking.

This undertaking will not adversely affect any known or recorded cultural resources within the APE, including Historic Properties, defined as cultural resources included in or eligible for inclusion in the NRHP. Additionally, the proposed communication site will not negatively impact the current viewshed as it relates to known Historic Properties. Thus, this undertaking will have no effect on Historic Properties.

5.6.4 – Visual Resources

The basic philosophy underlying the visual quality of a landscape depends on the visual contrast created between a project and the existing landscape. The contrast can be measured by comparing the project features with the major features in the surrounding landscape. The contrast rating evaluation should be conducted from the most critical viewpoint(s). These are usually along commonly traveled routes or at other likely observation points. Accordingly, the visual simulation rendering prepared for the Wileys Well Communication Site was created as if a viewer were observing the site while traveling west-bound on I-10, approximately 0.25 mile from the project site. Viewers traveling east-bound on I-10 and observing the project site from the same distance would experience a very similar view. The visual simulation renderings are located in Appendix D of this EA.

The simulated rendering of the proposed Wileys Well Communication Site allows for a reasonable comparison of the visual environment both “before” and “after” project implementation. It also allows for an accurate evaluation as to the degree of contrast that would be created by the undertaking. This evaluation and the assignment of a contrast rating is based on information contained in the Visual Contrast Rating Worksheet (BLM Form 8400-4), and included in Appendix D of this EA. The contrast rating and a summary of the worksheet data for the proposed communication site is provided below.

Contrast Rating

A contrast evaluation for the undertaking reveals that the degree of contrast would be weak. This is based on the small scope of the project, the presence of other cultural modifications near the site (most notably the existing 150-foot monopole communication tower, powerlines, and I-10), and close proximity of the project to the freeway. The predominant contrast would be the vertical lines established by the new 100-foot tower viewed against the irregular horizontal line of the background horizon to the west. Depending on the angle of view, the tower may be seen extending above the horizon. However, the existing 150-foot

monopole tower immediately adjacent is substantially taller than the proposed lattice-style tower. In fact, the height and mass of the existing tower somewhat overpowers the finer lines of the proposed tower.

For short durations of time as passersby travel I-10, the tower and associated facilities may attract the attention of the casual observer. However, the vertical line established by the tower would not be sufficiently bold to dominate the characteristic landscape. The 8-foot chain link fence and other structures at the site may also attract attention of travelers on I-10 for a short period of time, but would not likely be perceived as dominating the observer's view. Each of these factors suggests that an appropriate contrast rating for the proposed communication tower would be "weak."

As was noted in the Affected Environment analysis for the Wileys Well site presented in Section 4.6.5 of this EA, the interim VRM classification for this site is Class 3. According to BLM Manual 8410, when the degree of contrast is weak, a project can be seen and may attract attention, but should not dominate the view of the casual observer. A contrast rating of "weak" for the proposed undertaking is consistent with VRM objectives for Class 3 areas. Thus, this undertaking has no effect on visual resources.

5.6.5 – Residual Impacts

Approximately 0.23 acre of creosote scrub would be permanently lost along with its plants and wildlife. The project facilities, along with the existing adjacent communication facility and other communication facilities along I-10, would be visible from observation points in the area.

SECTION 6: CUMULATIVE IMPACTS

This action would not significantly increase the level of cumulative impacts in the eastern Riverside County area or adjacent areas. This area has been impacted by established highways, electric power lines, off-road vehicle recreation, and other existing communications sites. Each of these activities has cumulatively degraded the natural environment with varying effects on plants, wildlife and soils.

The undertaking is part of a number of ongoing environmental impacts occurring in this area. Similar impacts are likely to continue well into the foreseeable future as the human population of southern California swells. Human activity in the County of Riverside is considerable, and several hundred communication sites are already present throughout the region. The undertaking represents the need for additional emergency support communication capability due to increased use and development throughout the region. Further intensification of human use and development will continue this trend. While this is a fundamental change to the historical land use patterns in the area, this change need not be adverse (i.e., cumulatively considerable) as long as development complies with applicable land use and planning standards. The undertaking is consistent with those planning and management standards, and will therefore not create cumulatively considerable or adverse effects.

SECTION 7: MITIGATION MEASURES

As noted in Section 5.0, a number of mitigation measures are required to lessen the effects of the proposed action to less than an adverse effect. When mitigation measures are intended only to apply to particular sites, reference is provided within the measure to distinguish to which site(s) the measure applies.

BR-1: The project proponent shall submit the names of the potential “Qualified Biologist” and/or “Authorized Biologist” to the BLM for approval prior to the start of construction activities. A Qualified or Authorized Biologist is defined as a trained wildlife biologist who is knowledgeable concerning desert tortoise biology, tortoise minimization techniques, tortoise habitat requirements, identification of tortoise sign, and procedures for surveying for tortoises. Evidence of such knowledge may include one or more of the following: 1) employment as a field biologist working on desert tortoise; 2) successful completion of a contract dealing with desert tortoise fieldwork; and/or 3) attendance at a training course sponsored by the Desert Tortoise Council.

The name(s) of proposed Authorized Biologist(s) must be submitted to USFWS and CDFG for approval at least 15 days prior to anticipated need. An “Authorized Biologist” is defined as a wildlife biologist who has been authorized to handle desert tortoises by USFWS and CDFG for this project. This measure applies to all sites planned for development as part of the undertaking.

BR-2: A Field Contact Representative (FCR) must be on-site during all project activities. The FCR shall have the authority to halt all project activities that are in violation of all prescribed mitigation measures relating to desert tortoise. The FCR shall have a copy of all tortoise protective measures when work is being conducted on the site. The FCR may be an agent for the company, the site manager, any other project employee, a biological monitor, or other contracted biologist. An FCR is defined as a person designated by the project proponent who is responsible for overseeing compliance with desert tortoise protective measure and for coordination with the agency compliance officer. This measure applies to all sites planned for development as part of the undertaking.

BR-3: All employees of the project shall be given a desert tortoise education program by a Qualified/Authorized Biologist. This instruction would include training on the natural history of the desert tortoise, threats to the desert tortoise, protection afforded by State and Federal Endangered Species Acts (including prohibitions and penalties), the procedures for reporting encounters, and the importance of following the protection measures. The education program may consist of a class or video. It is recommended that workers carry wallet cards with important information while in the field. This measure applies to all sites planned for development as part of the undertaking.

BR-4: Pre-construction surveys shall be conducted to locate and remove desert tortoises prior to grading or actions which might result in harm to a desert tortoise or which remove tortoise habitat. The survey shall be conducted by an Authorized Biologist within 24 hours of the onset of the surface disturbance

unless a tortoise-proof fence has been installed that would prevent re-entry of the animals. This measure applies to all sites planned for development as part of the undertaking, with the exception of the Chuckwalla Communication Site.

BR-5: The FCR shall oversee compliance and coordination with the authorizing agency. Compliance shall include conducting species surveys, proper removal of species from areas being impacted, assurance that a sufficient number of Qualified/Authorized Biologists are present during surface disturbance, and that all conditions of the authorization are being met by proponent, contractors, and workers. The FCR shall have the authority to halt activities that are in not in compliance with the authorization. Any incident occurring during project activities which is considered by the biological monitor to be in non-compliance with the mitigation plan shall be documented immediately by the biological monitor. The FCR shall ensure that appropriate corrective action is taken. Corrective action shall be documented by the monitor. The following incidents shall require immediate cessation of the construction activities causing the incident, including 1) imminent threat of injury or death to a desert tortoise; 2) unauthorized handling of a desert tortoise, regardless of intent; 3) operation of construction equipment or vehicles outside a project area cleared of desert tortoise, except on designated roads, and 4) conducting any construction activity without a biological monitor where one is required. If the monitor and FCR do not agree, the Federal agency's compliance officer shall be contacted for resolution. All parties may refer to the resolution to the Federal agency's authorized officer. This measure applies to all sites planned for development as part of the undertaking.

BR-6: A mitigation fee based on the amount of acreage disturbed shall be required of proponents of new development. Within DWMA's (Category I) the lands delivered or equivalent fee shall be an amount that achieves a ratio of 5 acres of compensation land for every one acre disturbed (5:1). Lands would be acquired or enhanced within the same recovery unit as the disturbance. Outside DWMA's the lands delivered or equivalent fee shall be an amount that achieves a ratio of 1 acre compensation land for every 1 acre disturbed (1:1). Communication Sites within DWMA's and thus requiring a 5:1 replacement ratio are the following: Corn Springs and Wileys Well. Communication Sites outside of DWMA's and thus requiring a 1:1 replacement ratio are the following: Road 177, Vidal Junction, and Whitewater.

BR-7: To the extent possible, activities shall be scheduled when tortoises are generally inactive (November 1 through March 15). This measure applies to all sites planned for development as part of the undertaking.

BR-8: During the tortoise active season (March 15 through November 1), no overnight hazards to desert tortoise (e.g., auger holes, trenches, pits, or other step-sided depressions) shall be left unfenced or uncovered. Such hazards shall be eliminated each day prior to the work crew leaving the site. This measure applies to all sites planned for development as part of the undertaking.

BR-9: All surface disturbance activity shall be limited to the land area essential for the project. Work area boundaries and special habitat features shall be appropriately marked to minimize disturbance. All workers shall strictly limit their activities and vehicles to the areas marked. All workers shall be trained to recognize work area markers and to understand equipment movement restrictions. Where possible, previously disturbed areas shall be used as worksites and for storage of equipment, supplies, and excavated material. Blading of work areas shall be minimized to the extent possible. Pre-construction activity, such as removal of vegetation, shall occur in the presence of a Qualified Biologist. Disturbance of shrubs shall be avoided to the extent possible. Where shrubs must be disturbed, they shall be crushed rather than bladed or excavated. Project maintenance and construction, stockpiles of excavated materials, equipment storage, and vehicle parking shall be limited to existing disturbed areas wherever possible. Should use of existing disturbed areas prove infeasible, any new disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, location of burrows or vegetation, public health and safety, and other limiting factors. Special habitat features, particularly tortoise burrows, shall be flagged by the Qualified Biologist so that they may be avoided by construction equipment. This measure applies to all sites planned for development as part of the undertaking.

BR-10: For activities conducted between March 15 and November 1 in desert tortoise habitat, construction and operation activities shall be monitored by a Qualified Biologist approved by BLM. The Qualified Biologist shall be present during all activities in which encounters with tortoises may occur. The Qualified Biologist shall watch for tortoises wandering into the construction areas, check under vehicles, examine excavations and other potential pitfalls for entrapping animals, examine exclusion fencing, and conduct other activities necessary to ensure that death or injuries of tortoise is minimized. This measure applies to all sites planned for development as part of the undertaking.

BR-11: All trash and food items generated by construction and maintenance activities shall be promptly contained and regularly removed from the project site to reduce the attractiveness of the area to common ravens and other desert predators. Portable toilets shall be provided on site if appropriate. This measure applies to all sites planned for development as part of the undertaking.

BR-12: No dogs shall be allowed at any work site in desert tortoise habitat. This measure applies to all sites planned for development as part of the undertaking.

BR-13: Where possible, motor vehicle access shall be limited to maintained roads and designated routes. Where temporary access off a maintained road or designated route is permitted, a Qualified Biologist shall travel with each work crew to ensure that all desert tortoises and their burrows are avoided and that impact to the habitat is minimized. All vehicle tracks that might encourage public use shall be obliterated after temporary use. Where access from a maintained road or designated route to a project's site is part of the approved development plan, length and location of the route shall be designed to minimize impact to the habitat. The amount of disturbed area shall be subject to the mitigation fee, and the route shall be designated "Limited Use" and not open to the public. Vehicle speed within a project area, along right-of-

way maintenance roads and on routes designated for limited use shall not exceed 20 mph. Speed limits shall be clearly marked by the proponent, and workers shall be made aware of these limits. Vehicles parked in desert tortoise habitat shall be inspected immediately prior to being moved. If a tortoise is found beneath a vehicle, the Authorized Biologist shall be contacted to move the animal from harm's way, or the vehicle shall not be moved until the desert tortoise leaves of its own accord. The Authorized Biologist shall be responsible for taking appropriate measures to ensure that any desert tortoise moved in this manner is not exposed to temperature extremes which could be harmful to the animal. This measure applies to all sites planned for development as part of the undertaking.

BR-14: If construction is proposed to commence during the avian nesting season (approximately February 1 through August 31), then a pre-construction nesting bird survey of the site shall be conducted by a qualified biologist no more than 30 days prior to construction activities. If active nests are found onsite, then they must be avoided by an appropriate buffer until any young birds have fledged and the nest has completed its cycle, as determined by a qualified biologist. If construction occurs outside of the avian nesting period, then construction may commence without further impediment. This measure applies to all sites planned for development as part of the undertaking, with the exception of the Chuckwalla Communication Site.

SECTION 8: FREEDOM OF INFORMATION ACT CONSIDERATIONS

Public comments submitted for this environmental assessment, including names and street addresses of respondents, will be available for public review at the Palm Springs-South Coast Field Office during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays. Individual respondents may request confidentiality. If you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA), you must state this prominently at the beginning of your comments. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

SECTION 9: LIST OF ACRONYMS

ACEC	Area of Critical Environmental Concern
APE	Area of Potential Effect
ATSF	Atchison, Topeka and Santa Fe Railway
BLM	Bureau of Land Management
BMP	Best Management Practices
BO	Biological Opinion
CDCA	California Desert Conservation Area
CDD	California Desert District
CEQA	California Environmental Policy Act
CFR	Code of Federal Regulations
CMP	Coordinated Management Plan
CNDDDB	California Natural Diversity Database
CVA	Coachella Valley Amendment
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
DTC/C-AMA	Desert Training Center/California-Arizona Maneuver Area
DWMA	Desert Wildlife Management Area
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ERP	Emergency Response Plan

FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FCR	Field Contact Representative
FOIA	Freedom of Information Act
HVAC	Heating, Ventilation, and Cooling
I-10	Interstate Highway 10
LTVA	Long Term Visitor Area
MBA	Michael Brandman Associates
NAHC	Native American Heritage Commission
NECO	Northern and Eastern Colorado Desert
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PCE	Primary Constituent Elements
PSEC	Public Safety Enterprise Communication
RMP	Resource Management Plan
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office/ Officer
SR	State Route
SR-62	State Route 62
SR-177	State Route 177
SWPPP	Storm Water Pollution Prevention Program
T&E	Threatened and Endangered

TBD	To be determined
TCNS	Tower Construction Notification System
USFWS	United States Fish and Wildlife Service
VHF	Very High Frequency
VRM	Visual Resource Management
ZOI	Zone of Influence

SECTION 10: PERSONS/AGENCIES CONSULTED

U.S. Department of the Interior, Bureau of Land Management, Palm Springs-South Coast Field Office

Greg Hill, Environmental Coordinator

Claude Kirby, Realty Specialist

Mark Massar, Wildlife Biologist

Chris Dalu, Cultural Resources Specialist

Wanda Raschkow, Cultural Resources Specialist

Public Safety Enterprise Communication Project

Dan Nila, Project Manager

Chuck Rushing, Project Engineer

Ron Arbo, Cal-Fire Battalion Chief

Lt. Tim McCauley, Riverside County Sherriff's Department

Scott Clayton, Motorola

Riverside County Department of Facilities Management

Claudia Steiding, Senior Environmental Planner

Gerald Doak, Realty Specialist

SECTION 11: LIST OF PREPARERS

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Raul Henderson, Urban Designer, PBS&J

Tony Duerkop, GIS Analyst, PBS&J

Sandi Palkki, Senior Word Processor, PBS&J

SECTION 12: LIST OF REFERENCES

Bischoff, M.C. 2000. *The Desert Training Center/ California-Arizona Maneuver Area, 1942-1944: Historical and Archaeological Contexts*. Technical Series 75, Statistical Research, Inc. Tucson, Arizona. Prepared for the Bureau of Land Management, California Desert District. Unpublished Report. On file at the General Patton Memorial Museum, Chiriaco Summit, California.

Bureau of Land Management. 1980. *California Desert Conservation Area Plan (as amended)*.

Bureau of Land Management. 1994. *South Coast Resource Management Plan*.

Bureau of Land Management. 2002. *Northern and Eastern Colorado Desert Coordinated Management Plan and Final Environmental Impact Statement*.

Bureau of Land Management. 2002. *California Desert Conservation Area Plan Amendment for the Coachella Valley*.

Bureau of Land Management and California Public Utilities Commission. 2006. *Final Environmental Impact Report/ Environmental Impact Statement for the Proposed Devers-Palo Verde No. 2 Transmission Line Project*. Online at: <http://www.cpuc.ca.gov/Environment/info/aspn/dpv2/toc-feir.htm>

Bureau of Land Management. 2008. *National Environmental Policy Act Handbook H-1790-1*.

Manville, A.M. 2000. *The ABC's of Avoiding Bird Collisions at Communication Towers: The Next Steps*. Proceedings of the Avian Interactions Workshop, December 2, 1999, Charleston, South Carolina. Electric Power Research Institute. Online at: <http://www.fws.gov/migratorybirds/issues/towers/abcs.html>

Michael Brandman Associates. 2008. *Biological Resources Assessment, Public Safety Enterprise Communication Project Riverside, Orange, San Bernardino, and San Diego Counties, California*. (The Biological Resources Assessment included as Appendix B of this EA is based on this assessment and was updated by PBS&J in 2009)

Michael Brandman Associates. 2008. *Cultural Resources Assessment, Public Safety Enterprise Communication Project, Riverside, Orange, San Bernardino, and San Diego Counties, California*. (The Cultural Resources Assessment included as Appendix C of this EA is based on this assessment and was updated by PBS&J in 2009)

Michael Brandman Associates. 2008. *Draft Environmental Impact Report, Public Safety Enterprise Communication Project, Riverside, Orange, San Bernardino, and San Diego Counties, California*.

Appendix A – Communication Site Exhibits

**Chuckwalla
Corn Springs
Road 177
Vidal Junction
Whitewater
Wileys Well**

Chuckwalla

Local Vicinity Land Ownership and Administration Map
Local Vicinity Topographic Map
Local Vicinity Aerial Map
Site Photographs 1 to 4
Site Photographs 5 to 8
Construction Documents

Corn Springs

Local Vicinity Land Ownership and Administration Map
Local Vicinity Topographic Map
Local Vicinity Aerial Map
Site Photographs 1 to 4
Site Photographs 5 to 8
Construction Documents

Road 177

Local Vicinity Land Ownership and Administration Map
Local Vicinity Topographic Map
Local Vicinity Aerial Map
Site Photographs 1 to 4
Site Photographs 5 to 8
Construction Documents

Vidal Junction

Local Vicinity Land Ownership and Administration Map
Local Vicinity Topographic Map
Local Vicinity Aerial Map
Site Photographs 1 to 4
Site Photographs 5 to 8
Construction Documents

Whitewater

Local Vicinity Land Ownership and Administration Map
Local Vicinity Topographic Map
Local Vicinity Aerial Map
Site Photographs 1 to 4
Site Photographs 5 to 8
Construction Documents

Wileys Well

Local Vicinity Land Ownership and Administration Map
Local Vicinity Topographic Map
Local Vicinity Aerial Map
Site Photographs 1 to 4
Site Photographs 5 to 8
Construction Documents

Appendix B – Biological Resources Assessment

Appendix C – Cultural Resources Assessment

Due to the sensitive nature of cultural resources and requirements for their protection, specific information regarding their locations is provided on a need to know basis. Therefore, the cultural resources report for this project is not available for general public distribution. Persons with a legitimate need to access this information should contact the Project Archaeologist, Jennifer M. Sanka at JMSanka@pbsj.com

Appendix D – Visual Resource Management Data

**Corn Springs
Road 177
Vidal Junction
Wileys Well**

Corn Springs

Visual Simulation Key Map
Vantage Point View Before Project Implementation
Vantage Point View After Project Implementation
BLM Form 8400-4 Visual Contrast Rating Sheet

Road 177

Visual Simulation Key Map
Vantage Point View Before Project Implementation
Vantage Point View After Project Implementation
BLM Form 8400-4 Visual Contrast Rating Sheet

Vidal Junction

BLM Form 8400-1 Scenic Quality Field Inventory
BLM Form 8400-6 Sensitivity Level Rating Sheet
Visual Simulation Key Map
Vantage Point View Before Project Implementation
Vantage Point View After Project Implementation
BLM Form 8400-4 Visual Contrast Rating Sheet

Wileys Well

Visual Simulation Key Map
Vantage Point View Before Project Implementation
Vantage Point View After Project Implementation
BLM Form 8400-4 Visual Contrast Rating Sheet