

## 5.7 Land Use

This Application for Certification (AFC) section addresses the land use impacts of the Ridgecrest Solar Power Project (RSPP or Project). The Project site (Bureau of Land Management [BLM] right of way (ROW) and linear facilities), plus one mile surrounding the plant site and 0.25 mile on both sides of linears is referred to in the section as the "Project Study Area" (see Figure 5.7-1). Applicable laws, ordinances, regulations, and standards (LORS) are identified and discussed, as well as existing land use conditions, and the Project's compatibility with existing and planned land uses.

The land use discussion presented in the following pages is intended to support compliance by the California Energy Commission (CEC) with the requirements of the California Environmental Quality Act (CEQA), and by the BLM with the requirements of the National Environmental Policy Act (NEPA). The two agencies are conducting a joint review of the Project and a combined CEQA/NEPA document will be prepared.

### Summary

Project land use impacts will be less than significant. The Project site is located almost entirely on BLM-managed land in the California Desert Conservation Area (CDCA), and is managed under the CDCA Plan (1980) as amended. Most of the site is classified by BLM as Multiple Use Class Limited, with the remainder unclassified; both allow for solar energy development. BLM's Westwide Energy Corridors Environmental Impact Statement (EIS) identified a portion of the Project site as a utility corridor. Because the Project was not identified in the CDCA Plan, a CDCA Plan Amendment will be required.

An offsite water pipeline will run along existing ROWs for Brown Road and China Lake Boulevard. Approximately 1.7 miles of the water pipeline that runs along China Lake Boulevard is located within unincorporated Kern County. This area is zoned Estate District, which permits underground water facilities. The Project is not within, and would not be expected to significantly affect designated wilderness areas, National Parks, Areas of Critical Environmental Concern, or other designated sensitive land uses. However, a portion of the Project facility footprint is within the boundaries of the Mohave Ground Squirrel Conservation Area. It is also commonly used for recreational purposes by local residents, including off-highway vehicle (OHV) usage. Impacts to recreational users are expected but the Applicant will work with BLM to reroute existing trail access to minimize these impacts.

The closest residence to the Project site is located approximately 3,200 feet from the northwestern Project site boundary. Several other residences are approximately 3,250 to 3,575 feet from the eastern site boundary. Besides these residences, U.S. Highway 395, Brown Road, and the railroad spur, the majority of the land is undeveloped desert. These nearby land uses may be temporarily inconvenienced by noise, dust, and traffic during Project construction, which will be mitigated to the greatest extent possible. However, there would be minimal impacts on nearby uses during Project operation.

Cumulatively, the proposed solar and other renewable energy projects, including wind projects, will unavoidably alter the land use patterns of portions of Kern County and within the West Mojave Plan (WEMO) area. Land will be converted from undeveloped desert to renewable energy facilities. Additionally, the City of Ridgecrest is expecting population growth as a result of the recent Base realignment and Closure realignment, the proposed Super Wal-Mart, and general growth in the area. However, renewable energy projects comply with Federal legislation (e.g., Energy Policy Act of 2005), Department of Interior policy (orders issued by the last two Secretaries of the Interior), and State law and policy (e.g., Renewable Portfolio Standards) that recognize the need to utilize the solar energy resource of the California desert.

### 5.7.1 LORS Compliance

This section addresses potentially LORS related to land use. Table 5.7-1 summarizes the applicable Federal, State, and local LORS and additional discussion is provided following the table. The Project will comply with the applicable Federal, State, and local LORS.

**Table 5.7-1 LORS Applicable to Land Use**

LORS	Applicability	Where Discussed in AFC
<b>Federal:</b>		
Federal Land Policy and Management Act 1976 (FLPMA): 43 United States Code (USC) 1761 et seq.	Establishes the authority of the BLM to manage land within its jurisdiction, and provides management direction including planning, environmental, and ROW grant requirements.	Section 5.7.3
CDCA (Plan of 1980 as WEMO)	Under FLPMA, BLM is required to develop Resource Management Plans. All activities proposed for public land must be consistent with the approved Resource Management Plan(s). The relevant land use plan for this Project is the CDCA Plan, as amended by WEMO. WEMO provides a comprehensive multi-species conservation strategy for the West Mojave Desert.	Section 5.7.3
OHV Designation: Title 43 Code of Federal Regulations (CFR) Part 8342	BLM's National Management Strategy for Motorized OHV Use of Public Lands, issued January 19, 2001, provides new emphasis on managing OHV use and a framework for planning and managing OHV use on public lands in coordination with the public and local government and in cooperation with OHV user groups.	Section 5.7.3
Title 43 CFR Part 2920	Establishes procedures for the processing of lease proposals for non-Federal use of BLM lands.	Section 5.7.1
Energy Policy Act of 2005 (P.L. 105-58)	Establishes a goal for the Department of Interior to approve 10,000 megawatts (MW) of renewable energy on public lands by 2015.	Section 5.7.1
Air Installation Compatible Use Zones (AICUZ): Title 32 CFR Part 256	Instituted by the Department of Defense, the AICUZ guidelines provide recommendations for land uses that are compatible with airfield operations.	Section 5.7.3
Federal Aviation Administration's (FAA) regulations regarding Objects Affecting the Navigable Air Space: Title 14 CFR Part 77	Establishes standards for determining obstructions in navigable air space sets forth criteria for notification of FAA in case of potential obstruction hazards.	Section 5.7.3
National Environmental Policy Act (NEPA): 42 USC Sections 4321-4347 and Title 40 CFR Sections 1500-1508	Requires Federal agencies to review the environmental significance of proposed actions.	Section 5.7.1

**Table 5.7-1 LORS Applicable to Land Use**

LORS	Applicability	Where Discussed in AFC
<b>State:</b>		
Executive Order S-14-08 Renewable Portfolio Standard	Established a goal for the Renewable Portfolio Standard to produce 33 percent of California's electrical needs by 2020.	Section 5.7.1
California Government Code Sections 65352, 65940, and 65944	Requires evaluation of compatibility with military activities for any land use proposal located near a military installation or airspace.	Section 5.7.3
<b>Local:</b>		
Zoning Ordinance of Kern County, Kern County Code, Title 19	Promotes and protects the public health, safety, and welfare through the orderly regulation of land uses throughout the unincorporated area of the County. Does not apply to facilities on federal public lands.	Section 5.7.3
Kern County General Plan	<p><u>Land Use, Open Space, and Conservation Element.</u> Provides land use designations, goals, and policies for the development and conservation of land within the unincorporated areas of Kern County.</p> <p><u>Energy Element.</u> Provides goals, policies, and implementation measures for orderly development of local energy resources.</p> <p><u>Circulation Element.</u> Protects future road corridors in the County's Valley and Desert regions to accommodate future development by specifying road width standards.</p> <p>Does not apply to facilities on Federal public lands.</p>	Sections 5.7.3 and 5.7.4
Kern County, Title 17, Buildings and Construction	Provides standards and procedures for building construction and grading and for floodplain management.	Section 5.7.1

### 5.7.1.1 Federal LORS

#### **FLPMA and Federal Regulations Pertaining to ROWs**

Construction, operation, and maintenance of electric facilities within BLM jurisdiction require a BLM ROW grant. A ROW grant is an authorization to use a specific piece of public land for a certain project, such as roads, pipelines, transmission lines, and communication sites. A ROW grant authorizes rights and privileges for a specific use of the land for a specific period of time. Generally, a BLM ROW is granted for a term appropriate for the life of the project.

Applications for commercial solar energy facilities will be processed as ROW authorizations under FLPMA, Subchapter V (43 USC 1761 et seq.), and BLM regulations, Title 43 CFR Part 2800. Commercial concentrating solar power electric generating facilities such as the Project must comply with the BLM's planning, environmental, and ROW application requirements. In reviewing a ROW application for the Project, BLM will consider all project information, existing land use information, and environmental impacts. BLM will hold a public hearing prior to deciding whether to issue a ROW grant; the NEPA environmental review process also includes public hearings and other opportunities for public involvement.

Pursuant to Title 43 CFR Section 1610.5-3, any ROW granted by the BLM must be consistent with the relevant Resource Management Plan(s). For the Project, the relevant plans are the CDCA and WEMO, which are discussed below.

In processing an application for a ROW, the BLM must comply with NEPA (42 USC Sections 4321-4347) and its implementing regulations (Title 40 CFR Sections 1500-1508). NEPA requires Federal agencies to identify the environmental and socioeconomic effects of a proposed action or decision on the area affected by the action. The NEPA environmental review process also includes public hearings and other opportunities for public involvement. NEPA compliance for the Project will be achieved by the preparation of a combined NEPA/CEQA document prepared jointly by the BLM and the CEC. The Applicant will obtain the ROW grant before construction.

FLPMA ROW regulations Parts 2800 and 2920 include authorization, application requirements, and processing requirements for ROW grants that are required when there is a proposal for substantial construction on Federal land. The grant process includes review of Federal and non-Federal land issues including land use compatibility, public interest, and sensitive resources. The procedural and informational requirements of the regulations vary by the nature of the anticipated use. The process allows construction immediately upon receipt of and acceptance of the land use authorization by the selected applicant. Some authorizations require a Notice to Proceed. Once the project is constructed, BLM may inspect and monitor the land use and its improvements. The Project must be compliant with public health, safety, and welfare, and take corrective action as required by the authorized officer.

#### **CDCA Plan of 1980, as amended by WEMO Plan**

Under FLPMA, BLM must manage the land within its jurisdiction in compliance with a Resource Management Plan. The entire Project site and some of the Project linear facilities will be located on lands under BLM jurisdiction and managed pursuant to the CDCA Plan, as amended. The CDCA Plan serves as a guide for the management of all BLM-administered lands in three desert areas: the Mojave, the Sonoran, and a small portion of the Great Basin. The CDCA Plan covers approximately 25 million acres, of which 12 million are public lands. The primary goal of the CDCA Plan is to provide overall maintenance of the land while planning for multiple uses and balancing the needs of people with the protection of the natural environment.

In March 2002, the CDCA was amended by WEMO. The Project area is located within the area covered by WEMO. WEMO includes the West Mojave Desert area, encompassing 9.3 million acres in Inyo, Kern, Los Angeles, and San Bernardino counties: 3.3 million acres of public lands administered by BLM, 3.0 million acres of private lands, 102,000 acres administered by the State of California, and the balance of military lands administered by the Department of Defense. WEMO establishes a conservation area for the long-term survival and protection of the Mohave Ground Squirrel (MGS).

The CDCA Plan/WEMO organizes BLM-managed lands into one of four multiple-use classes: Controlled Use (C), Limited Use (L), Moderate Use (M), and Intensive Use (I) (see Figure 5.7-2). The Project site is located on BLM Multiple Use Class (MUC) L and unclassified BLM lands. MUC Class L protects sensitive, natural, scenic, ecological, and cultural resource values. Lands within the WEMO area that are designated as MUC Class L are “managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished.” For MUC Class L lands, wind and solar electric generation facilities may be allowed after NEPA requirements are met (nuclear and fossil fuels are not allowed).

Nearly the entire range of the MGS, a state-listed threatened species, is within the West Mojave planning area, and most of this land is public land managed by BLM. A total of 1,726,712 acres is included within the MGS Conservation Area (MGSCA). Public lands within the MGSCA are designated as a BLM Wildlife Habitat Management Area in the CDCA Plan. Within the MGSCA, the public land south of Owens Lake is

MUC L. As further discussed in Section 5.3, Biological Resources, consistent with WEMO, development is only allowed within one percent of public lands in the MGSCA and according to the BLM 12,801.06 acres are available for development.

The Energy Production and Utility Corridors Element discusses locating power plants on BLM land managed pursuant to the CDCA Plan. Sites associated with power generation or transmission that are not identified in the CDCA Plan must apply for a Plan Amendment. BLM has committed to “rapid implementation” of “fuel-replacement alternative energy programs,” including solar power. The Project and its linear facilities are not identified in the existing CDCA Plan. Thus, a Plan Amendment is expected to be required, in accordance with Chapter 7 of the CDCA and the planning regulations set forth at Title 43 CFR Section 1600 et seq.

The CDCA Plan requires that new gas, electric, and water transmission facilities and cables for interstate communication may be allowed only within appropriately designated corridors. An approximately one-mile wide Section 368 Utility Corridor and the BLM Designated Utility Corridor runs north-south across the western portion of the Project site (Figure 5.1-1). Thus, the Project’s short transmission line (0.5 mile, only 300 feet of which are outside the Project site boundary), located entirely within the corridor, will be in compliance with the CDCA Plan (see CDCA BLM Solar Energy Projects Applications Map).

The Project will require the relocation of roughly 7,500 feet (1.4 miles) of two existing transmission lines owned and operated by Southern California Edison (SCE). The first is a double-circuit 230-kilvolt (kV) line (with one of the circuits currently operated at 115 kV) and the second is a double-circuit 115-kV line. The California Public Utilities Commission has jurisdiction over the relocation of both lines. For the relocation of the 230-kV line, California Public Utilities Commission General Order 131-D may require that Southern California Edison (SCE) obtain a Certificate of Public Convenience and Necessity because the transmission line may be used for operation in excess of 200 kV and none of the exemptions to the requirement that are described in the General Order applies; otherwise a Permit to Construct will be required. For the 115-kV line, SCE will be required to obtain a Permit to Construct because the line carries (and will continue to carry) a load of less than 200 kV. The Applicant has initiated discussions with SCE regarding the Certificate of Public Convenience and Necessity/Permit to Construct applications.

Both transmission lines traverse Federal land pursuant to ROWs issued by BLM. SCE will be required to obtain amended ROWs for the relocations, and BLM is required to review these amendments through the NEPA process. The additional land required for the amended ROW is contained within the ROW the Applicant is seeking from BLM. The Applicant will assign this portion of the ROW to SCE at the appropriate time, with the concurrence of BLM. In accordance with NEPA, the relevant environmental resource sections of this AFC evaluate the potential impacts of these transmission line relocations. See also Section 1.0, Executive Summary. BLM’s recent Westwide Corridor Programmatic Environmental Impact Statement (PEIS) may also assist in satisfying BLM’s obligations under NEPA.

### **US Department of Interior, Bureau of Land Management, Western Mojave Desert Off Road Vehicle Designation Project**

In March 2003, the CDCA was amended with the Western Mojave Desert Off-Road Vehicle Designation Project. The Designation Project designates routes within the CDCA Plan area as open, closed, or opened on a limited basis to motorized vehicle access. The Western Mojave is divided into subregions for route designation purposes. The Project is located at the northern edge of the El Paso Subregion and borders the Ridgecrest Subregion. The El Paso and Ridgecrest Subregions of the WEMO planning area are popular recreational destinations for local residents, but also possess many sensitive natural and cultural features including a Natural Register District and MGS habitat. Thus, the BLM Ridgecrest Field Office plans to establish the El Paso Collaborative Access Planning Area (El Paso CAPA) to address motorized access routes and to protect sensitive resources. As described in the BLM Ridgecrest’s application to the

California Department of Off Highway Vehicle Recreation Division, the process would designate routes as open, closed, or limited following the principles of species and habitat protection specified in the WEMO Plan. The route designations would then be adopted as a component of the CDCA Plan.

According to the Environmental Assessment and Draft CDCA Plan Amendment for the Designation Project, the El Paso and Ridgecrest Subregions will continue with the 1985-87 designations until completion of the El Paso CAPA process. Shown in Figure 5.7-3, there are six open designated routes that traverse the Project ROW, with four of the routes (EP0222, EP0223, EP0234, EP0235) located within the Project footprint, and two of the routes located outside of the Project footprint (EP 0236, EP 02265). Open designations are used for intensive OHV use areas where there are no special restrictions or where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel. The Applicant is working with the BLM and the OHV community to clarify and revise trail access around the Project site.

### **Current Federal/State Interagency Cooperation for Renewable Energy Applications**

California Executive Order S-14-08 established a goal for the Renewable Portfolio Standard to produce 33 percent of California's electrical needs by 2020. Two interagency memoranda of understanding (MOUs) have been executed to encourage the development of renewable energy sources that meet the State of California's Renewable Portfolio Standard.

On August 8, 2007, the BLM California Desert Conservation District and the CEC executed a MOU to establish a policy for the joint environmental review of solar thermal power plant projects. As indicated elsewhere in the AFC, a key element of this joint review will be preparation of a joint NEPA/CEQA document by the two agencies. The Project addressed in this AFC will receive a joint NEPA/CEQA review by the CEC and BLM, respectively. The intention of this joint review is to expedite permitting of solar power plants that are needed to meet the State's Renewable Portfolio Standard goals. This AFC is intended to address BLM needs as well as those of the CEC in order to support preparation of the joint NEPA/CEQA document.

In November 2008, BLM, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the CEC signed a MOU regarding the establishment of the California Renewable Energy Action Team. The goal of this MOU is to accelerate cooperation among Federal and State agencies to facilitate the State of California's renewable energy goals. The parties agreed to work cooperatively to develop a conservation strategy, referred to as the DCAP, to provide for effective protection and conservation of the natural resources within the Mojave and Colorado Desert Regions while allowing solar and other qualified Renewable Portfolio Standard energy project siting development in a manner that avoids or minimizes environmental impacts. As appropriate, the Applicant is working with these various agencies individually and collectively to support the acceleration of the Project permitting/licensing process.

### **BLM ROWs and Leases, Permits, and Easements, Title 43 CFR Parts 2800 and 2920**

The BLM is responsible for the orderly and timely processing of proposals for non-Federal use of public lands. The procedural and informational requirements of the regulations vary by the nature of the anticipated use. Part 2800 addresses ROW grants and Part 2920 covers leases, permits, and easements. The authority for these regulations is FLPMA, Subchapter V, Sections 1761-1771. Subchapter V directs BLM to process requests for ROWs for authorization of projects, associated transmission lines or other appurtenant facilities that might be constructed or operated on land it manages.

### **Energy Policy Act of 2005**

The Federal Energy Policy Act of 2005 directs Federal agencies to undertake efforts to ensure energy efficiency, and the production of secure, affordable, and reliable domestic energy. Section 211 sets a goal for the Department of Interior (of which the BLM is a part), to approve 10,000 MWs of renewable energy on public lands by 2015.

## **NEPA**

The Office of Energy Efficiency and Renewable Energy, Department of Energy and BLM are currently preparing a Solar Energy Development PEIS to evaluate utility-scale solar energy development on BLM land. Among the goals of the PEIS are to develop and implement BLM-specific programs that would establish environmental policies and mitigation strategies for solar energy projects, and to amend relevant land use plans to include a new BLM solar energy development program. As a practical matter, the PEIS will help BLM to more efficiently address the significant number of applications it has received seeking approval of utility-scale solar power plant projects on BLM lands. The Draft PEIS is expected to be released for public review in the fall of 2009, and its contents could impact the Project by, for example, changing the Resource Management Plans for the BLM land upon which Project construction is proposed.

As mentioned earlier, NEPA compliance for the Project will be achieved through a joint NEPA/CEQA document. This document will be prepared jointly by the BLM and CEC.

## **Air Installation Compatible Use Zone Program**

The purpose of the U.S. Air Force's Air Installation Compatible Use Zone Program is to protect the health, safety and welfare from noise and hazards through compatible development in the airport environment. The Program was instituted by the Department of Defense in 1973 to address land development surrounding military air installations, and to identify and develop a plan for land areas for which development should be significantly influenced by the operation of the airfield.

The AICUZ study is used to assist the local communities as a tool for future planning and zoning activities. The study addresses safety concerns within the flight route corridors used by aviators for approaches and departures to and from the airfield. The China Lake AICUZ study was approved in 1977, and an updated interim China Lake AICUZ study was released in 2007. The 2007 study is an interim report, and after further evaluation, an updated AICUZ may be released.

China Lake Naval Air Weapons Station (NAWS) maintains operational capabilities at Armitage Airfield. The China Lake AICUZ study analyzes baseline and prospective flight operations and evaluates the noise and safety considerations associated with those operations. Based on this analysis, an "AICUZ footprint" and a "Military Influence Area" (MIA) for Armitage Airfield was created and land use compatibility within these areas were evaluated. The AICUZ Program also identifies Accident Potential Zones, which are areas where an aircraft-related mishap is most likely to occur. Additionally, the AICUZ study addresses: the lighting (direct or reflected) that could impair pilot vision; towers, tall structures, and vegetation that penetrate navigable airspace or are to be constructed near the airfield; land uses that would generate smoke, steam, or dust; land uses that would attract birds, especially waterfowl; and electromagnetic interference with aircraft communications, navigation, or other electrical systems.

The Project area does not fall into any Accident Potential Zones, but a small portion of the northeast corner of the Project ROW area is located in the AICUZ footprint and MIA (Figure 5.7-4). This area is located in Noise Zone 1, which includes areas where Community Noise Exposure Level (CNEL) is between 60 to 65 CNEL. However, no Project structures are proposed in this area.

## **Title 14 CFR Part 77, Subpart C: Objects Affecting Navigable Airspace**

The FAA Regulations, Title 14 CFR Part 77, Subpart C, Objects Affecting Navigable Airspace, establishes standards for determining obstructions to air navigation. It applies to existing and proposed manmade objects, objects of natural growth, and terrain. The following standards for determining "Obstructions to Navigation" are listed in Section 77.23, Standards for Determining Obstructions:

- (a) An existing object, including a mobile object, is, and a future object would be, an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:
- (1) A height of 500 feet above ground level at the site of the object.
  - (2) A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within three nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.

The Project is more than three miles from any airport and almost all of its structures will be under 80 feet high. The transmission lines will not exceed 120 feet and the air-cooled condenser will measure 120 feet in height. For these reasons, the Project will not be an obstruction to navigation.

### **The Farmland Protection Policy Act**

The Farmland Protection Policy Act (FPPA) of 1981 was enacted to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. It requires identification and protection of the nation's farmlands. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency. For the purpose of the FPPA, farmland includes designated Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. Prime Farmland is defined as land with the best combination of physical and chemical characteristics able to sustain long-term production of agricultural crops. Farmland of Statewide Importance is defined as land with a good combination of physical and chemical characteristics for agricultural production, having only minor shortcomings, such as less ability to store soil moisture, compared to Prime Farmland. Unique Farmland is defined as land used for the production of the State's major crops on soils not qualifying as Prime Farmland or Farmland of Statewide Importance.

The Project site has no history of agricultural use, nor has it been mapped for agricultural purposes or has applied any special agricultural land use designations under the Farmland Mapping Act or the Williamson Act. Thus, the Farmland Mapping Act and Williamson Act do not apply to the Project and are not discussed further.

### **5.7.1.2 State LORS**

#### **Warren-Alquist State Energy Resources Conservation and Development Act**

The CEC, through the AFC process, is the decision-making authority over land use decisions and environmental determinations in accordance with the Warren-Alquist State Energy Resources Conservation and Development Act (Warren-Alquist Act) codified in Section 25000 et seq. of the Public Resource Code. Although the CEC has exclusive jurisdiction over the siting of power plants 50 MW or greater in size, in almost all cases, the CEC will demonstrate conformity with State, regional, and local laws, including land use laws (Public Resource Code Section 25523(d)(1)).

Title 20 CCR Section 1701 et seq., establishes CEC procedures, documentation, and required environmental and other findings for siting of electrical energy generating facilities. Included in these regulations are specific instructions for public notice; environmental and other information required to be submitted with all applications; and the required public safety, environmental and other findings to be made by the CEC in order to approve an AFC.

As discussed in the Federal LORS section above, the CEC will participate with BLM in the preparation of a joint NEPA/CEQA document to streamline the review process for renewable energy facilities.

### **Farmland Mapping and Williamson Act**

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status. The Project site has no history of agricultural use. It has not been mapped for agricultural purposes, and no special agricultural land use designations have been assigned pursuant to the FMMP or the Williamson Act. Thus, the FMMP and Williamson Act do not apply to the Project.

### **Military Overflight Areas**

The California Government Code, referred to in part as the State Planning and Zoning Law, includes the provisions of Senate Bill (SB) 1462, adopted in 2004, that require the military to be notified of any land use proposal located within 1,000 feet of a military installation, within special use airspace, or beneath a low level flight path. To aid in the implementation of SB 1462, the California Office of Planning and Research has drafted the R-2508 Joint Land Use Study (JLUS) to address land use issues for the R-2508 military range complex (R-2508 Complex). A JLUS is a collaborative planning effort between active military installations, surrounding counties and cities, and other affected agencies. The R-2508 is largest block of restricted airspace in the United States. This 20,000 square-mile range complex encompasses large portions of Inyo, Kern, San Bernardino, and Tulare counties and includes Edwards Air Force Base, China Lake NAWS, and the Army's Fort Irwin National Training Center (see Figure 5.7-5).

The Project site is located within restricted area R-2506, a designation within the R-2508 area, and thus is considered "special use airspace". These designations require that an evaluation of land use compatibility be conducted pursuant to sections 65352, 65940, and 65944 of the California Government Code, which include the provision for consultation among the project applicant, public agency, and the affected military branch. The JLUS for the R-2508 complex was published May 2008, and contains a number of policies affecting land use decisions for projects within the R-2508 complex. The R-2508 JLUS promotes compatible land development in areas subject to aircraft noise and accident potential by providing compatible use guidelines for land areas surrounding the installation.

The R-2508 JLUS recommends the BLM to refer specific BLM development applications to military installations for review and to ensure early notification to military installations and local communities of specific development requests on managed lands when the initial application is revised. The Applicant has consulted with the military Complex Sustainability Office regarding military airspace use at the Project site to confirm that Project structures comply with military air space requirements and this office has confirmed that the Project complies with all requirements (see Appendix K, Agency Correspondence).

#### **5.7.1.3 Local LORS**

The entire Project site, with the exception of a portion of the water pipeline, is located on Federal public land managed by BLM. The portion of the water pipeline that is outside BLM land is within unincorporated Kern County. Figure 5.7-6 and Table 5.7-2 show zoning within the Project Study Area. Table 5.7-3 describes zoning regulations applicable to each of the zones and overlay zones within the Project site and the land use study area.

The Kern County Zoning Ordinance and General Plan are applicable only to those portions of the water pipeline and of the Project's land use study area that are not within BLM lands. Facilities constructed on Federal public lands pursuant to a ROW grant under FLPMA Section 501, 43 USC 1761, are required to comply with State "siting, construction, operation, and maintenance" standards that are more stringent than equivalent Federal standards. See FLPMA Section 505, 43 USC 1761(a)(iv). However, as the U.S. Court of Appeals for the Ninth Circuit has held, such facilities are not required to comply with local zoning ordinances or plans to the extent those ordinances or plans conflict with federal law. ("This court has supported the right of the Federal government to exercise [the] authority [to grant ROWs for facilities consistent with FLPMA], whether the authorized party is public or private, free of any regulatory

interference by local agencies .... Absent a 'clear congressional mandate' that makes the intended preemption 'clear and unambiguous,' local regulation takes a back seat to applicable Federal law.”). Thus, a county ordinance that would serve to prohibit the construction of a solar energy facility (and any associated linear facilities) “impermissibly conflicts with and must give way to the statutorily authorized granting of a Federal ROW to” build those facilities on federal public lands. Thus, the Kern County General Plan and zoning ordinances listed above and discussed below do not apply to the Project, except for that part of the water pipeline that will be located within unincorporated Kern County. This portion of the Project's compliance with local land use and zoning laws is discussed below.

### **Kern County Zoning Ordinance**

The Zoning Ordinance of Kern County (County Zoning Ordinance) is contained in Title 19 of the Kern County Code and sets forth the land uses and land development regulations applicable within the unincorporated areas of Kern County. The County Zoning Ordinance contains lists of “Permitted Uses,” “Uses Permitted with a Conditional Use Permit,” and “Prohibited Uses” within each of 21 zoning districts (i.e., zones). In addition, the County Zoning Ordinance also contains 12 combining zoning districts (i.e., overlay zones).

**Table 5.7-2 Zoning Designations Near or Within the Ridgecrest Site**

<b>Zone District</b>	<b>Description of Permitted Uses and Development Regulations</b>
<b>A</b>	The Exclusive Agriculture (A) District applies to a small portion of the Project Study Area north and northwest of the Project site. The A District is to designate areas suitable for agricultural uses and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to nonagricultural uses. Uses in the A District are limited primarily to agricultural uses and other activities compatible with agricultural uses.
<b>A-1(MH)</b>	Limited Agriculture District (A-1) and Mobile-Home Combining District (MH) applies to a small portion of the private property abutting the site. The A-1 District applies to areas suitable for a combination of estate-type residential development, agricultural uses, and other compatible uses. The MH District provides for the installation of mobile homes with or without foundations in agricultural, resource-related, and residential-zoned areas.
<b>OS</b>	Open Space (OS) applies to property north of the plant site in the Project Study Area. The purpose of the OS District is to designate lands in public or private ownership that are essentially unimproved and should remain in open space use. No Project structures are proposed in this District.
<b>E E (RS) E (RS) (FPS)</b>	<p>The Estate (E) District applies to the majority of the area surrounding the Project site and along the water pipeline that is not BLM land. The E District is to designate areas suitable for larger lot residential living environments. Uses are limited to those typical of and compatible with quiet residential neighborhoods. Transmission lines and supporting, towers, poles, and underground facilities for gas, water, electricity, telephone, or telegraph service are permitted uses in the E District. The E District applies to the portion of the proposed water pipeline not on BLM land.</p> <p>The purpose of the Residential Suburban (RS) Combining District is to expand the number and type of permitted domestic agricultural uses within rural residential areas.</p> <p>The purpose of the Floodplain Secondary (FPS) Combining District is to protect the public health and safety and minimize property damage by designating areas that are subject to flooding with relatively low velocities or depths and by establishing reasonable restrictions on land use in such areas.</p>

Kern County has specific regulations designed to address military compatibility. Section 19.08.160 of the County Zoning Ordinance includes restrictions on the height of structures in military flight areas. The Project is located in an area which must be subject to military review for structures over 100 feet within the Project area (see Figure 5.7-7). The Project's proposed maximum structure height of up to approximately 120 feet on the plant site and 120 feet for transmission structures would not conflict with military or civilian aircraft operations. The Applicant has consulted with the Department of Defense regarding military airspace use at the Project site to confirm that Project structures comply with military air space requirements (see Appendix K, Agency Correspondence).

### **Kern County General Plan**

The Kern County General Plan was adopted in 2004. This section discusses applicable land use designations and policies described in the Kern County General Plan.

**Land Use, Open Space, and Conservation Element.** The Kern County General Plan land use designations represented within the Project area are: Non-Jurisdictional (Map Code 1.1 and 1.2); Residential (Map Code 5.5, 5.6, 5.7 and 5.8); and Resource Management (Map Code 8.5), with overlay designations; Seismic Hazard (Map Code 2.1); and Flood Hazard (Map Code 2.5). These designations are shown on Figure 5.7-8 and permitted uses for each land use designation are listed in Table 5.7-3.

**Table 5.7-3 Project Area General Plan Land Use Designations for Kern County**

<b>Land Use Designations</b>	<b>Permitted Uses/ Description</b>	<b>Location as shown in Figure 5.7-8</b>
Non-Jurisdictional (Map Code 1.1, 1.2)	Map Code 1.1- Applied to all property under the ownership and control of the various State and Federal agencies operating in Kern County (military, U.S. Forest Service, BLM, Department of Energy, etc.). Map Code 1.2- Used to identify the areas of cities within the County, which are responsible for the preparation and maintenance of their own General Plans.	Entire Project site, transmission line, and portions of the water lines are designated Federal land.
Residential (Map Code 5.5, 5.6, 5.7, 5.8)	Map Code 5.5- One Dwelling Unit/Net Acre Maximum This constitutes a single-family designation with rural service needs in the valley and desert regions, while in the mountain region, residential uses of this density will require urban service provision. Map Code 5.6- Residential – Minimum 2.5 Gross Acres/Unit. Map Code 5.7- Five Gross Acres/Dwelling Unit Maximum Designated in the outlying, less densely settled areas, often characterized with physical constraints and not requiring connections to public water and sewer infrastructure. Map Code 5.8- 20+ Gross Acres/Dwelling Unit Maximum.	Portion of the water pipeline along China Lake Boulevard
Resource Management (Map Code 8.5)	Primarily open space lands containing important resource values, such as wildlife habitat, scenic values, or watershed recharge areas. These areas may be characterized by physical constraints, or may constitute an important watershed recharge area or wildlife habitat or may have value as a buffer between resource areas and urban areas. Other lands with this resource attribute are undeveloped, non-urban areas that do not warrant additional planning within the foreseeable future because of current population (or anticipated increase), marginal physical development, or no subdivision activity.	Private land located to the east of the Project site.

Land Use Designations	Permitted Uses/ Description	Location as shown in Figure 5.7-8
Seismic Hazard Overlay (Map Code 2.1)	Alquist-Priolo Special Study Zone and other recently active fault zones.	Small portion of the water supply pipeline on China Lake Boulevard.
Flood Hazard Overlay (Map Code 2.5)	Special Flood Hazard Areas (Zone A), as identified the Flood Insurance Rate Maps of the Federal Emergency Management Agency and supplemented by floodplain delineating maps that have been approved by the Kern County Engineering and Survey Services Department.	Private land located to the east of the Project site.

Residential designation is described in Section 1.6 of the General Provisions of the Land Use/Conservation/Open Space Element. Relevant goals include ensuring compatibility with land uses around airports. Prior to approval, all new discretionary residential projects located in the Airport Influence Areas will be reviewed for compatibility with the Airport Land Use Compatibility Plan.

Other relevant policies are stated in Section 1.10 of the General Provisions of the Land Use/Conservation/Open Space Element. The policies address public services and facilities including methods of sewage disposal and water supply, fugitive dust and respirable particulate matter control measures, promoting preservation of cultural and historical resources, protection of threatened and endangered species, efficiency of water-related infrastructure, and minimizing light and glare from new development projects. The Project will comply with these general provisions.

**Energy Element.** The Energy Element acknowledges the County's opportunities to develop new energy sources, and includes a goal in Section 5.4.5 to "encourage safe and orderly commercial solar development." Adopted policies for this goal that are relevant to the Project are:

- The County shall encourage domestic and commercial solar energy uses to conserve fossil fuel and improve air quality.
- The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.
- The County should encourage solar development in the desert and valley regions previously disturbed, and discourage development of energy projects on undisturbed land supporting State or federally protected plant and wildlife species.

Relevant Implementation measures include:

- The County shall continue to maintain, and update as necessary, provisions in the Kern County Zoning Ordinance to provide adequate development standards for commercial solar energy development.
- The County should work with affected State and Federal agencies and interest groups to establish consistent policies for solar energy development.

Section 5.4.7 addresses the new transmission line construction to accommodate the increased development of electrical generating plants. The goal is "to encourage the safe and orderly development of transmission lines to access Kern County's electrical resources along routes, which minimize potential adverse environmental effects." Relevant policies include:

- The County should encourage the development and upgrading of transmission lines and associated facilities (e.g., substations) as needed to serve Kern County's residents and access the County's generating resources, insofar as transmission lines do not create significant environmental or public health and safety hazards.
- The County shall review all proposed transmission lines and their alignments for conformity with the Land Use, Conservation, and Open Space Element of this General Plan.
- In reviewing proposals for new transmission lines and/or capacity, the County should assert a preference for the upgrade of existing lines and use of existing corridors where feasible.
- The County should work with other agencies in establishing routes for proposed transmission lines.
- The County should discourage the siting of above-ground transmission lines in visually sensitive areas.
- The County should encourage new transmission lines to be sited/configured to avoid or minimize collision and electrocution hazards to raptors.

Included are implementation measures in which the County commits to monitor the supply and demand of electrical transmission capacity locally and statewide, and to maintain and update as necessary those provisions in the zoning ordinance necessary to provide for transmission line development.

**Circulation Element, Section 2.** Section 2.3.3 of the County Circulation Element requires the protection of future road corridors in the County's valley and desert regions to accommodate future development. The Element's road width standards are listed below. These standards do not include State highway widths that would require additional ROW for rail transit, bike lanes and other modes of transportation. Kern County considers these modifications on a case-by-case basis.

Expressway (Four Travel Lanes)	Minimum 110-foot ROW
Arterial (Major Highway)	Minimum 110-foot ROW; County Standard 110 feet
Collector (Secondary Highway)	Minimum 90-foot ROW; County Standard 90 feet
Commercial-Industrial Street	Minimum 60-foot ROW; County Standard 60 feet
Local Street (Select Local Road)	Minimum 60-foot ROW; County Standard 60 feet

### **Kern County Buildings and Construction Code**

Regulations and procedures for building, grading, and alteration of natural floodplains are contained in Title 17 of the Kern County Code. Included are provisions for issuance of building and grading permits, standards and procedures for preparation and review of building and grading plans, and requirements to minimize public and private losses due to flood conditions. The Project will comply with the requirements of the Kern County Buildings and Construction Code.

#### **5.7.1.4 Involved Agencies**

The agencies with jurisdiction to process land use entitlements and/or approvals for the Project are listed in Table 5.7-4.

**Table 5.7-4 Agency Contact List**

<b>Agency Contact</b>	<b>Phone/E-mail</b>	<b>Permit/issue</b>
Hector Villalobos BLM Ridgecrest 300 S. Richmond Road Ridgecrest, CA 93555	(760) 384-5400 Hector_Villalobos@ca.blm.gov	ROW Application
Steven Borchard BLM California Desert District 22835 Calle San Juan De Los Lagos Moreno Valley, CA 92553	(951) 697-5200 Steven_J_Borchard@blm.gov	CDCA Plan Amendment
Lorelei Oviatt Special Projects Division Chief Kern County Planning Department Public Services Building 2700 "M" Street, Suite 100 Bakersfield, CA 93301-2370	(661) 862-8600 loreleio@co.kern.ca.us	Compatibility with County land use policy and code (zoning, land use plans and policies)
Charles Lackey, Director Kern County Engineering & Survey Services Department Public Services Building 2700 "M" Street, Suite 570 Bakersfield, CA 93301-2370	(661) 862-5100 ess@co.kern.ca.us	Determines compliance with County grading, drainage, and building regulations
Patricia J. Ebel Transportation Development Engineer Kern County Roads Department 2700 M Street, Suite 400 Bakersfield, CA 93301	661-862-8850 Permit@co.kern.ca.us	Water pipeline permit

### 5.7.1.5 Required Permits and Permit Schedule

The BLM will require compliance with NEPA before it will grant a ROW allowing the use of Federal land. BLM will be the lead Federal agency for compliance with NEPA and the CEC will be the lead State agency for compliance with CEQA. It is expected that the two agencies will coordinate their analysis and issue joint environmental documents and separate decisions. The Kern County Engineering & Survey Services Department is responsible for the review of construction plans and issuance of various construction permits (e.g., grading and building permits). The Kern County Roads Department is responsible for issuing pipeline permits and will issue the permit to the pipeline owner (Indian Wells Valley Irrigation District). Table 5.7-5 presents required permits related to Land Use. No Conditional Use Permit is required by Kern County because the Project site is located entirely on BLM lands.

**Table 5.7-5 Land Use Related Permits Required and Schedule**

<b>Permit</b>	<b>Agency</b>	<b>Schedule</b>
ROW Grant	BLM	Prior to construction
CDCA Amendment	BLM	Prior to construction
Pipeline Permit	Kern County Roads Department	Prior to construction

## 5.7.2 Affected Environment

The land use study area encompasses lands within one mile of the Project ROW and within 0.25 mile on either side of the Project's electrical transmission route and the corridor for the Project's water supply pipeline (Figure 5.7-1). The BLM, Kern County, and the City of Ridgecrest are the governmental entities with jurisdiction within the Project study area. The entire Project site is located on BLM lands, and the Project water line route includes lands within the jurisdiction of the BLM and Kern County.

### 5.7.2.1 Regional Setting

The Project is located in the southern portion of the Indian Wells Valley in Kern County, California. The Valley is bordered by the Sierra Nevada on the west, the Cosos on the north, the Argus Range on the east, and the El Paso Mountains on the south. San Bernardino County is located approximately eight miles to the east, and Inyo County approximately 20 miles to the north. China Lake NAWS is located approximately six miles to the north of the site.

State Route 14 and U.S. Highway 395 are key north-south highways through the Valley. Besides providing access to and from Ridgecrest, they provide through traffic connections for inter-county traffic. Recreation travel from Southern California to the mountain recreation areas heavily use both routes. State Route 178 provides east-west service through the area and continues as city streets within Ridgecrest (Inyokern Road, China Lake Boulevard, and Ridgecrest Boulevard).

The nearest large cities are Ridgecrest, approximately five miles to the northeast and California City, approximately 32 miles to the south. The Lancaster/Palmdale area is approximately 80 miles to the south. The Project is bordered by U.S. Highway 395 to the northeast and State Route 14 to the west. Brown Road runs east-west through the Project site. As discussed in Section 5.11, Socioeconomics, the population of Kern County is projected to grow between 2.5 percent to 2.9 percent annually over the next 20 years.

### 5.7.2.2 Project Site and Immediate Vicinity

The proposed plant site is located in primarily in Township 27 South, Range 39 East and a small portion of Township 28 South, Range 39 East, Principle Meridian 21. Ownership information for the properties surrounding the site and along the linear facilities routes is provided in Appendix A, Surrounding Properties.

The Project ROW is irregularly shaped and consists of approximately 3,920 acres of desert land managed by the BLM. The plant will occupy approximately 1,440 acres within the overall 3,920-acre ROW and with a disturbance area of approximately 1,760 acres. The facilities will include: an administration building, a parking area, a power block, a switchyard, bioremediation areas, a wastewater treatment facility, onsite access and paved maintenance roads, perimeter fencing, water pipeline, drainage ditches, stormwater dispersion areas, and temporary laydown areas for construction staging activities, including assembly facilities which may later be converted to maintenance facilities. The plant consists of two solar fields. The northern solar field will be located north of Brown Road, and the southern solar field will be located south of Brown Road. The Project will require the relocation of a section of an SCE 230-kV power line around the southwest corner of the southern solar field

The Project site is comprised of undeveloped desert with naturally-vegetated areas. Brown Road, a two-lane county road, traverses diagonally through the middle of the Project site. The Project site is relatively flat with elevations ranging from approximately 2,580 feet in the north to approximately 2,800 feet in the south. A series of rock outcrops are located in the eastern portion of the site near the intersection of Brown Road and U.S. Highway 395. There are two large ephemeral washes that traverse the Project site and smaller dry desert washes traverse the site generally from the southeast to the northwest. The majority of the Project site is covered by desert scrub. A former Southern Pacific

Railroad ROW is located along the western portion of the Project ROW, to the west and south of southern solar field (see Figure 2 in Appendix I). No Project facilities are proposed within the railroad ROW. The railroad ties and tracks have been removed, but the ROW remains, and includes raised berms, bridges, and stormwater conveyances. An overhead power transmission ROW traverses the western portion of the site.

The site is considered by the BLM as “multi-use land”. Recreational OHV use is evident from the many trails the public has been using in this area, which have degraded the site. The Project site is within the El Paso Mountains region of the West Mojave Off-Road Vehicle Designation Project, and is a Limited Use Area for OHVs. As shown in Figure 5.7-3, four open designated OHV trails traverse the Project footprint. The Project area is commonly used for organized equestrian and OHV group events. Other recreational uses include mountain biking, horseback riding, hiking, running, camping, rock hounding, target shooting, hunting (upland game including quail, doves, rabbits and coyotes), wildflower and wildlife viewing, etc. A rocky knoll located within the Project site, northwest of the intersection of U.S. Highway 395 and Brown Road, is utilized by the public as a recreational destination. According to the BLM, the majority of the activity occurs south of Brown Road. The BLM has described the frequency of use of the site for recreational purposes as daily.

The BLM has issued Special Recreation Permits for organized group events on the public lands. The BLM has also permitted events on the site including motorized touring, filming on Brown Road and sheep grazing. The Project study area is located within the Cantil-Common sheep allotment area. Common allotment means that the area has several sheep ranchers as permittees. According to the BLM, sheep grazing has occurred on the site in 2008 and 2009, although the site constitutes a small portion of the allotment and is not heavily grazed. The area might be used for three or four days in the spring; sheep are moved daily so they may be in the Project area for only a few days. The site is a convenient location for sheep grazing due to the access of Brown Road, even though herders have to truck in water to the site for the sheep. The most recent permits were issued in March of 2008 and are due to be renewed on March 1, 2018. There is also an interest to designate the railroad to the south of the ROW as “Rails-to-Trails,” but there is currently no timeframe for this project.

The BLM does not have visitation statistics for the Project site; however, Table 5.7-6 summarizes recreational uses and visitation rates to the El Paso Management Area in 2008. The Boral Corral Pit, just west of the Project site, is a sand and gravel pit that has been developed into a shooting range by a local club. The pit is used by the club (Boy Scouts) and by the general public for recreational activities, especially shooting. The El Paso Mountains Wilderness is located approximately two miles southwest of the Project site. The most common activities within the El Paso Management Area include hunting upland birds, OHV trail uses, camping, viewing cultural sites, camping, hiking, and target practice.

A 160-acre private parcel is located directly east and adjacent to the southern solar field. An occasional use trailer is located on this parcel. An inactive burn dump is located approximately 550 feet south of the site. The residence nearest to the Project site is approximately 3,200 feet west of the northern solar field. The far western portion of the plant site is located near the intersection of Brown Road and Wiknich Street, beyond which is the Ridgecrest Gun Club. The northwestern portion of the property is bordered to the west by Calvert Boulevard. Several other residences are approximately 3,250 to 3,575 east of the eastern site boundary. Besides these residences and the U.S. Highway 395 and Brown Road, the majority of the land is undeveloped desert. No residences exist near the southern portion of the plant site.

**Table 5.7-6 El Paso Management Area Recreational Use and Visitation**

<b>Activity</b>	<b># of Participants</b>	<b>Visitor Days</b>
<b>Site: Boral Corral Pit, ID 08100.000</b>		
Rockhounding/Mineral Collection	1,751	146
Target Practice	5,752	1,042
<b>Site: Dispersed- El Paso Mountains, ID: 0000.000</b>		
Bicycling- Mountain	6,001	1,000
Camping	6,001	12,002
Driving for Pleasure	26	17
Hiking/Walking/Running	6,001	1,500
Horseback Riding	6,122	1,051
Hunting- Upland Bird	16,002	5,334
OHV- ATV	2,000	500
OHV- Cars/Trucks/SUVs	32,004	5,334
OHV- Motorcycle	8,027	1,351
Target Practice	12,002	2,000
Viewing – Cultural Sites	12,002	1,000
<b>Site: El Paso Mountains, ID: 08007.000</b>		
Backpacking	1,102	2,205
Hiking/Walking/Running	17,636	7,348
Horseback Riding	4,409	1,837
Hunting- Upland Bird	6,614	2,205
Rockhounding/Mineral Collection	4,409	735
Viewing – Cultural Sites	11,023	1,837
<b>Site: Last Chance Canyon, ID: 0002.000</b>		
Bicycling-Mountain	359	90
Camping	717	1,435
Hiking/Walking/Running	717	359
Horseback Riding	538	224
Hunting- Upland Bird	1,435	957
Nature Study	179	90
OHV- Cars/Trucks/SUVs	2,511	837
OHV- Motorcycle	1,076	359
Photography	538	179
Picnicking	717	60
Rockhounding/Mineral Collection	1,076	538
Target Practice	1,076	538
Source: BLM Recreation Management Information System, 2009.		

### **Scenic Land Use**

No designated scenic resources exist within the Project area. Refer to Section 5.13, Visual Resources, for further discussion on scenic resources.

### **Agricultural Land Use**

According to the California Department of Conservation FMMP, no lands designated as containing Prime Farmland or Farmland of Statewide Importance are present within the Project site or within the study area. FMMP categorizes the Project site as Non-agriculture and Natural Vegetation.

### **Natural Resource Protection and Extraction**

No mining claims exist on the site. Two mining claims exist southeast of the Project site (in the southeast corner of Township 28S Range 39E Section 2) and mining prospecting has occurred in the general area in the past. There have been no successful mining activities on or near the site in the past.

### **Cultural and Historic Land Use**

Project cultural resources specialists performed archival research, reviewed all cultural resource investigation reports within the Project Boundary; contacted all other interested agencies, Native American groups, and historic societies; and conducted a cultural resources field investigation. See Section 5.3, Cultural Resources, for further discussion on cultural resources.

### **Education and Religious, and Unique Land Use**

There are no schools, daycare facilities, convalescent centers, or hospitals within, or in the immediate vicinity of, the Project area. No unique land uses occur in the Project Study Area.

#### **5.7.2.3 Linear Facilities**

Offsite linear facilities to be developed for the Project include a water supply line and a transmission line to interconnect the Project with the regional grid. The water pipeline will exit the Project site from the eastern side of the northern solar field and will run east along an existing ROW along Brown Road, and then north along an existing ROW along China Lake Boulevard in Kern County. The water pipeline crosses BLM land (3.3 miles) and unincorporated Kern County (1.7 miles). Land uses along the linear facilities are mainly undeveloped desert, with scattered residences further removed from the roadways. Table 5.7-7 summarizes existing land uses and BLM and Kern County land use or zoning designation for each Project feature. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance exists around the linear facilities.

A new 230-kV transmission line from the turbine generator to a new nearby switchyard will be built on the Project site. The approximately 0.5-mile long transmission line will interconnect with an existing SCE 230-kV Inyokern/Kramer Junction transmission line passing west of the Project site approximately 300 feet beyond the ROW boundary. The transmission poles will be approximately 120 feet high. The Project includes the relocation of two existing SCE transmission lines along the southwestern corner of the southern solar field, a continuation of this relocated transmission line to an interconnection of the Project through a switching station within the proposed BLM ROW. The transmission lines are located entirely on BLM lands.

**Table 5.7-7 Existing Land Uses and Designations for the Project**

<b>Project Feature</b>	<b>Existing Land Uses</b>	<b>Land Management or General Plan Land Use and Zoning Designation</b>
Plant Site	Undeveloped desert with naturally-vegetated areas. Frequently used for multiple uses including OHVs, horseback riding, shooting, hunting, bird watching, etc.	<u>BLM</u> Multiple Use Class L, Unclassified BLM land <u>Kern County</u> Non-jurisdictional land (Map Code 1.1, 1.2)
Transmission Line	Rerouted SCE transmission line and onsite transmission will occur within the Project site and ROW. Undeveloped desert with naturally vegetated areas. Frequently used for multiple uses including OHVs, horseback riding, shooting, hunting, bird watching, etc.	<u>BLM</u> Multiple Use Class L, Unclassified BLM land
Water Pipeline	The water pipeline runs east of the Project site along China Lake Boulevard for approximately three miles and ends before West Kendall Avenue. The pipeline will run within existing ROWs along China Lake Boulevard. Surrounding land uses are mainly undeveloped desert.	<u>BLM</u> Multiple Use Class L, Unclassified BLM land <u>Kern County</u> Residential (Map Code 5.5, 5.6, 5.7, 5.8) Estate District

#### 5.7.2.4 Military and Air Land Uses

The China Lake NAWS consists of two major land areas: the North Range, encompassing 950 square miles (606,926 acres), and the South Range, encompassing 760 square miles (503,510 acres). The North Range lies in portions of Inyo, Kern, and San Bernardino counties and the South Range is located entirely within San Bernardino County. The North Range is approximately 3.5 miles north of the Project site. The facility covers 1.1 million acres of land and was established in 1943 with the mission of supporting research, development, testing, and evaluation of weapons, as well as to provide primary training in the use of these weapons. The installation currently serves as a station for the research, development, testing, and evaluation of weapons. China Lake NAWS operates Armitage Airfield.

Edwards Air Force Base and Fort Irwin National Training Center are located, respectively, approximately 25 miles south and 50 miles east of the Project site. The complex of military airspace in the region is collectively referred to as the R-2508 Complex. The R-2508 Complex covers approximately 20,000 square miles and includes the entire Project area (Figure 5.7-5). The airspace in the vicinity of China Lake NAWS includes three separate components: Military Operations Areas, Restricted Areas, and Air Traffic Control Assigned Airspace.

Restricted Areas are three-dimensional areas of airspace established by the FAA to support special aircraft flight activities such as military aviation training. The northern portion of the Project site is located within restricted area R-2506. Armitage Airfield is located in R-2505. R-2506 has a vertical restriction that extends from the surface to 6,000 feet above mean sea level.

The closest civilian airports to the Project site are the Inyokern Airport, located approximately 10 miles northwest of the site and the Trona Airport located approximately 30 miles northeast of the site. The Inyokern Airport provides commercial service with three paved runways, and the Trona Airport is a general aviation airport that has a single paved runway approximately 4,300 feet (1,311 meters) long.

In areas surrounding military operations, the Department of Defense has developed policies and land use compatibility maps to limit the impact of military operations on the surrounding communities. Noise contours represent composite noise resulting from aircraft operations and flight tracks. A small portion of the Project site boundaries is located in the 60-65 decibels contour, though none of the facilities are proposed in that portion of the site. As discussed above in Section 5.7.1.3, the Applicant has consulted with the Department of Defense and has confirmed that Project structures comply with military air space requirements.

#### **5.7.2.5 Recent or Proposed Development Code and General Plan Amendments and Recent Discretionary Review by Public Agencies**

There have been no recent or proposed zoning or land use amendments within the last 18 months by the BLM or Kern County or within the Project study area. Discretionary reviews are actions that require review and approval by an overseeing regulatory agency. There have been no discretionary reviews by BLM or Kern County within the Project study area within the past 18 months.

### **5.7.3 Environmental Impacts**

The land use impact evaluation focuses on the following issues: 1) the conformity of the Project with Federal and local land use plans, ordinances and policies; and 2) the potential for the Project to have direct, indirect and/or cumulative land use conflicts with existing and planned uses.

#### **5.7.3.1 Construction Phase Impacts**

The small number of residential uses in the land use study area would experience some temporary impacts from construction phase dust emissions, as discussed in Section 5.2, Air Quality. With planned mitigation measures, these impacts would be less than significant. Project construction activities will be designed to minimize interference with existing land uses in the vicinity of the Project site. The temporary nature of Project construction is one of the reasons that other construction phase land use impacts (noise, traffic) also will be less than significant, as discussed in the respective portions of this AFC. The overall Project construction period is estimated to be 28 months. Construction impacts will be mitigated as discussed in the appropriate AFC sections.

#### **5.7.3.2 Operations Phase Impacts**

The Project site is proposed on undesignated BLM land or on Multiple Use Class L (Limited Use) BLM land, which may allow for wind and solar electric generation facilities after NEPA requirements are met. However, as stated earlier, power generation or transmission not located within identified energy production and utility corridors in the CDCA Plan must apply for a CDCA Plan Amendment. Thus, with a CDCA Amendment, the proposed Project would be in conformance with CDCA/WEMO.

The western and southern portions of the Project site are located within a BLM-designated utility corridor where there is existing transmission available for connection. The Project will require construction of a new transmission line from the turbine generator to a new switchyard. The Project will also require that two existing SCE transmission lines be rerouted around the southwestern part of the southern solar field. These activities will occur exclusively on BLM land and will be permitted with the ROW grant and within the CEC licensing process.

The southern solar field falls within a WEMO MGSCA. Section 5.3, Biological Resources, further discusses the MGSCA.

The Project will not physically divide an established community because the Project site is located on undeveloped BLM land, and the water pipeline is proposed within existing ROWs along existing roadways. The water pipeline is located partly on BLM land (approximately 3.3 miles) and partly in unincorporated Kern County (approximately 1.7 miles). The portion of the water pipeline that will be

located in Kern County is within existing County ROW, and abuts private parcels zoned Estate District. Underground water facilities are permitted uses in this District. Thus, the water pipeline is a compatible use with the Kern County Zoning Ordinance.

The Project will not affect designated wilderness areas, important mineral resource areas, or other designated sensitive land uses. Few residences are located in the Project Study area. Viewshed changes are described in Section 5.15, Visual Resources. Mining prospecting has occurred, but no successful mining activities have occurred in the past on the Project site.

The Project site is not designated as a special use recreational area, but is commonly used as a multi-recreational site due to its proximity to the City of Ridgecrest and because the site is easily accessible along Brown Road. The Project will remove recreational activities and potentially displace some of those activities to other locations. The Project site will affect four open designated OHV trails. The Project will also change the viewshed (as described in Section 5.15, Visual Resources) and this may affect how the public uses the area. Some public land users may not want to conduct their recreational activities near a solar facility because they prefer a more natural setting. The Project has been designed to reduce as much as possible the size of the Project area so as to minimize the effect on recreational land users. As stated earlier, the Applicant is working with the BLM and the OHV community to clarify and revise trail access. OHV trail maps will be modified to take into account the Project. However, impacts to recreational users at the Ridgecrest site will be unavoidable but less than significant, since OHV user needs will be taken into consideration in the modification of the OHV trail maps.

The Project site is located in the Cantil-Common sheep allotment area, and sheep grazing occurs on site for a few days of the year. According to the BLM, one or two sheep grazing operators may be impacted by the removal of the land for grazing.

While a small portion of the northeast corner of the Project site is located in the AICUZ footprint and MIA, no Project structures are proposed in this area. The same area is located in Noise Zone 1, which includes areas where CNEL is between 60 to 65 CNEL. Thus, no incompatibility with the AICUZ would result. Refer to Section 5.8, Noise, for further discussion.

The Project is well-matched to policies requiring that a compatible land use in the region not generate excessive noise, traffic, light, fumes, or odors, or have a negative impact on adjacent neighbors. The Project lighting scheme and layout will be designed to have minimal lighting that is directed away from adjacent land uses. In addition, all lighting will be focused for safety and security purposes as necessary and directed down to minimize nighttime light pollution.

In concert with the requirements implicit in Section 1908.60 of the Kern County Zoning Ordinance, the Applicant provided a Project profile description, including equipment height and layout information parameters, to the designated representatives of the U.S. military branches with operations in the vicinity of the Project site for their review as required. Correspondence received in response from the R-2508 Complex Sustainability Office, representing the Edwards Air Force Base Air Flight Test Center, China Lake NAWS Division, and Fort Irwin National Training Center, is provided in Appendix K of the AFC. It was concluded that the proposed Project as configured is compatible with the military branch operations subject to mitigation measures applicable to the use of military-approved Project communications equipment.

The Project would be largely self-contained and would not jeopardize the public health, safety, or welfare of any residences in this area. The solar facility is intended to comply with State policy to provide 33 percent of its electricity from renewable energy by 2020 to “provide multiple and significant benefits to California’s environment and economy, including improving local air quality and reducing global warming pollution, diversifying energy supply, improving energy security, enhancing economic development, and creating jobs...” Additionally, development of the Project site’s solar resources would be consistent with

Kern County Energy Element and the Solar Energy Development goal and policies. The Project would comply with the County Energy Element's policies to avoid significant environmental or public health and safety hazards for solar energy development.

### 5.7.3.3 Cumulative Impacts

As discussed in Section 5.1, Environmental Introduction, the development of BLM wind monitoring projects and wind energy production projects is too speculative to consider in this analysis. In Kern County, there are three proposed solar projects: the Beacon Solar Power Project (2,012 acres), and two BLM photovoltaic projects (6,960 acres). Combined with these proposed solar projects, RSPP may alter land use patterns in undeveloped desert areas of Kern County, but will not result in cumulatively considerable impacts as this cumulative development (12,892 acres or 20 square-miles) represents only 0.25 percent of the land area of Kern County (8,141 square-miles). In addition, the BLM and Westside Corridor EIS have identified a portion of the Project site as a utility corridor, raising the possibility that transmission projects could be developed near the Ridgecrest area, but as linear facilities, these projects would not occupy a significant land area in the vicinity of the Project site.

The City of Ridgecrest is expecting to experience population growth as a result of the recent Base realignment and Closure realignment, the proposed Super Wal-Mart, and general growth in the area. However, the Project, along with other energy projects, is not likely to increase the overall population of the area except temporarily during construction. If a number of projects are constructed within the same time frame and same general region, there may be a need for temporary workers beyond those that are locally available. This may result in impacts on local infrastructure, housing, and services and temporary cumulative impacts to the region during construction, and is further discussed in Section 5.11, Socioeconomics). There will be a temporary addition of nuisance factors such as construction traffic, noise and dust. However, these effects will be offset by the substantial positive economic impact of increased spending in the region. These impacts and mitigation measures to reduce these impacts to less than significant are discussed in the appropriate sections of the AFC.

The need to utilize the solar energy resource of the California desert is recognized in applicable land use/resource management and planning documents (e.g., CDCA and WEMO), Federal legislation (Energy Policy Act of 2005), and in an order issued by Secretary of Interior Salazar in June 2009, that among other things vows to have 13 commercial-scale solar projects on public lands under construction by the end of 2010.

### 5.7.4 Mitigation Measures

The following mitigation measures will be implemented to ensure that land use impacts are less than significant.

- LAND-1** Prior to construction, the Applicant will obtain and, provide to the CEC's Compliance Project Manager a copy of the BLM ROW Grant and an amendment to the CDCA to comply with BLM's CDCA Plan and Title 43 CFR 2800 and 2880.
- LAND-2** The Applicant will work with the BLM to reroute existing trail access to minimize impacts to recreational and OHV users in the area.

### 5.7.5 References

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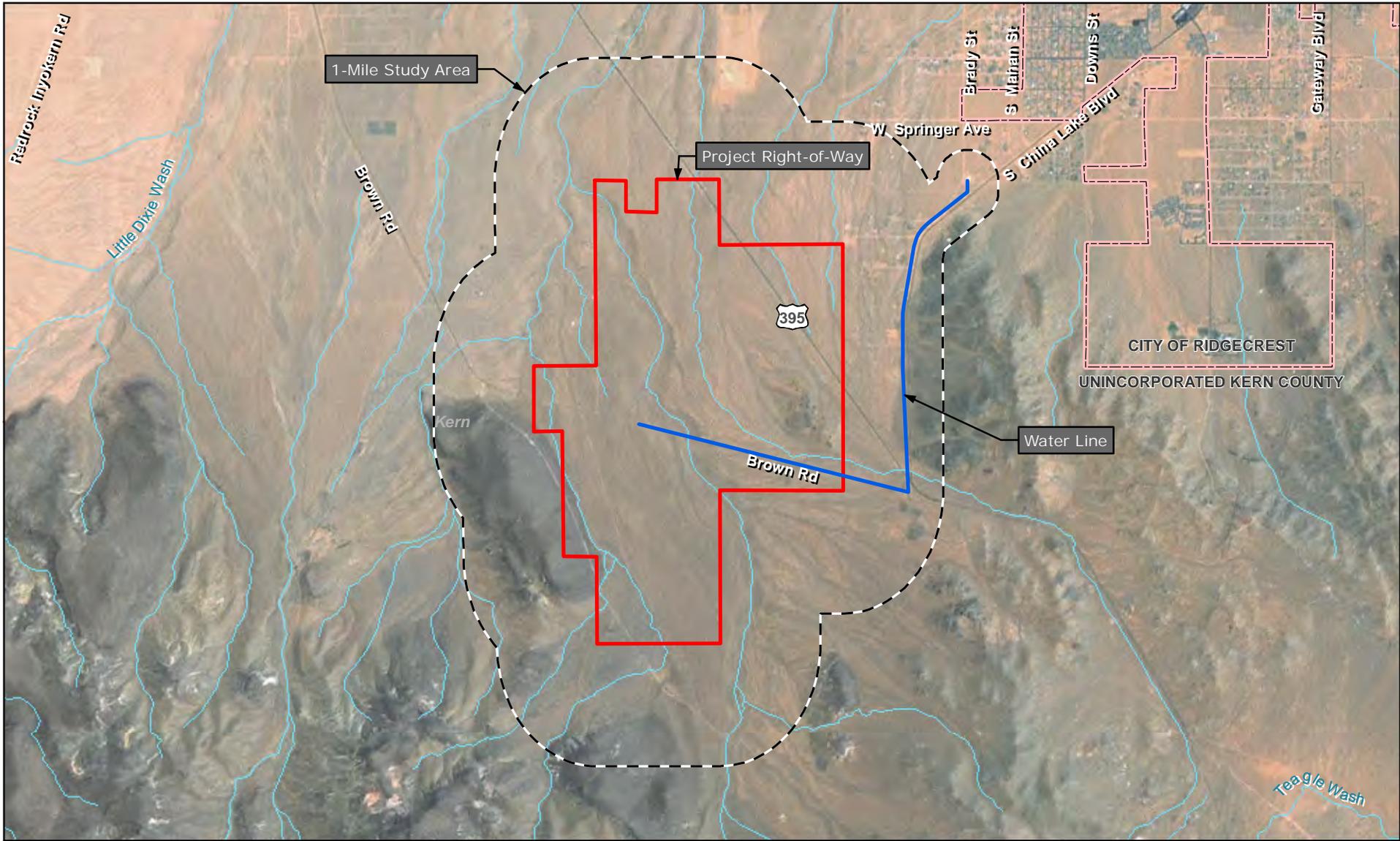
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Schwarzenegger, Arnold. 2008. California Office of the Governor, Executive Order S-14-08.

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**Legend**

- Project Right-of-Way
- 1 Mile Study Area
- City Limits
- Water Line

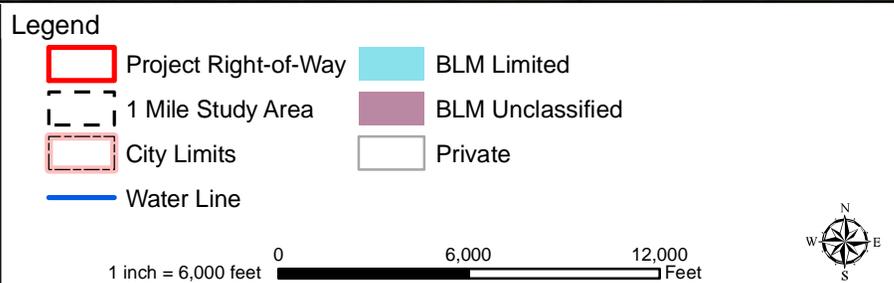
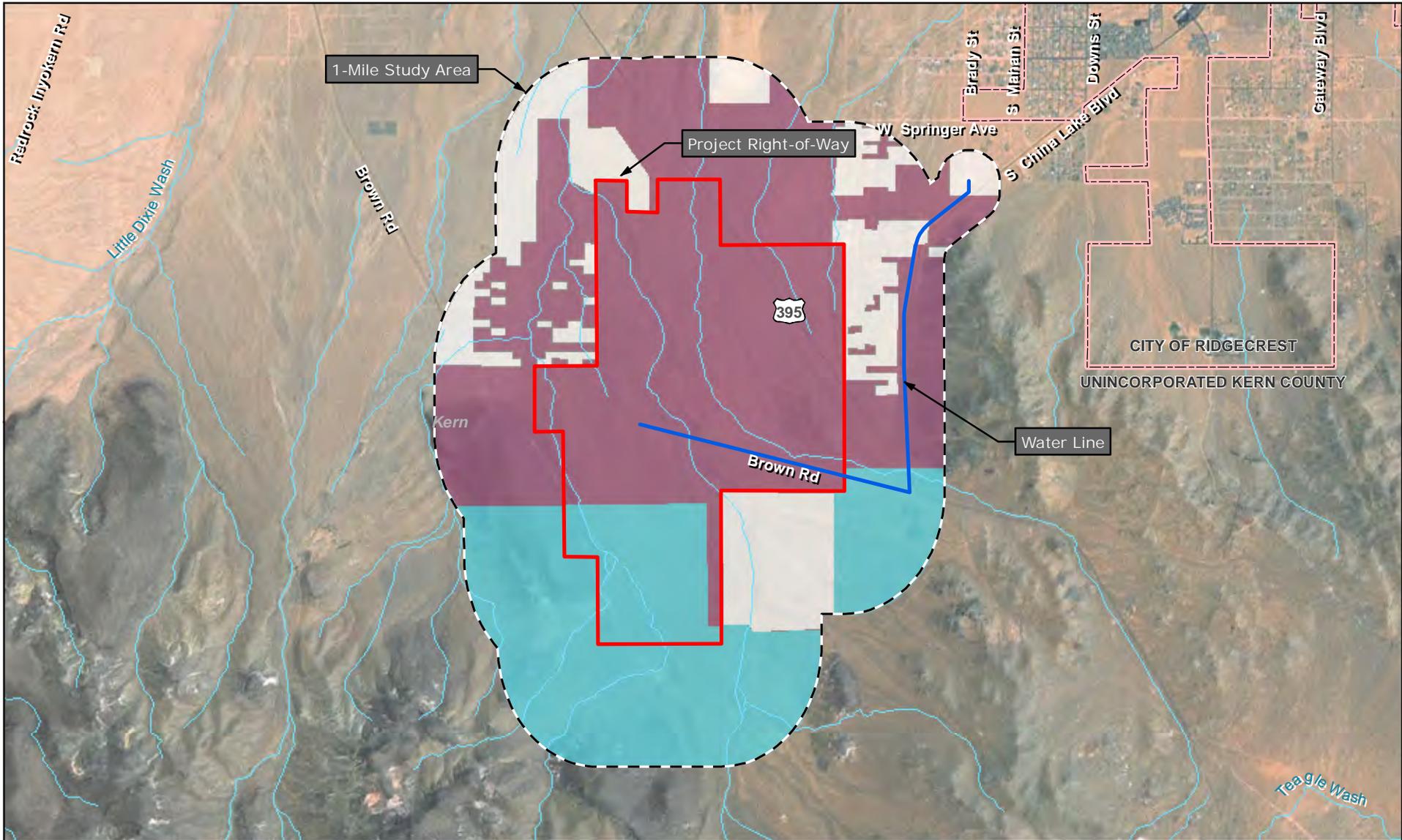
1 inch = 6,000 feet

0 6,000 12,000 Feet

**Ridgecrest Solar Power Project**

**Figure 5.7-1**  
**Land Use Study Area**

Date: September 2009

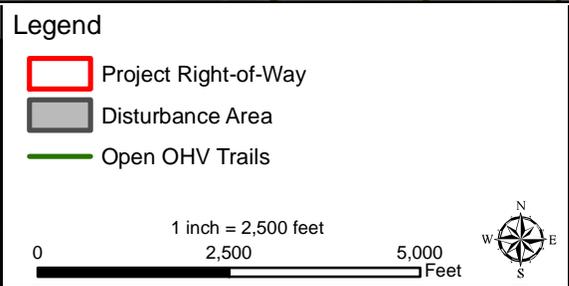
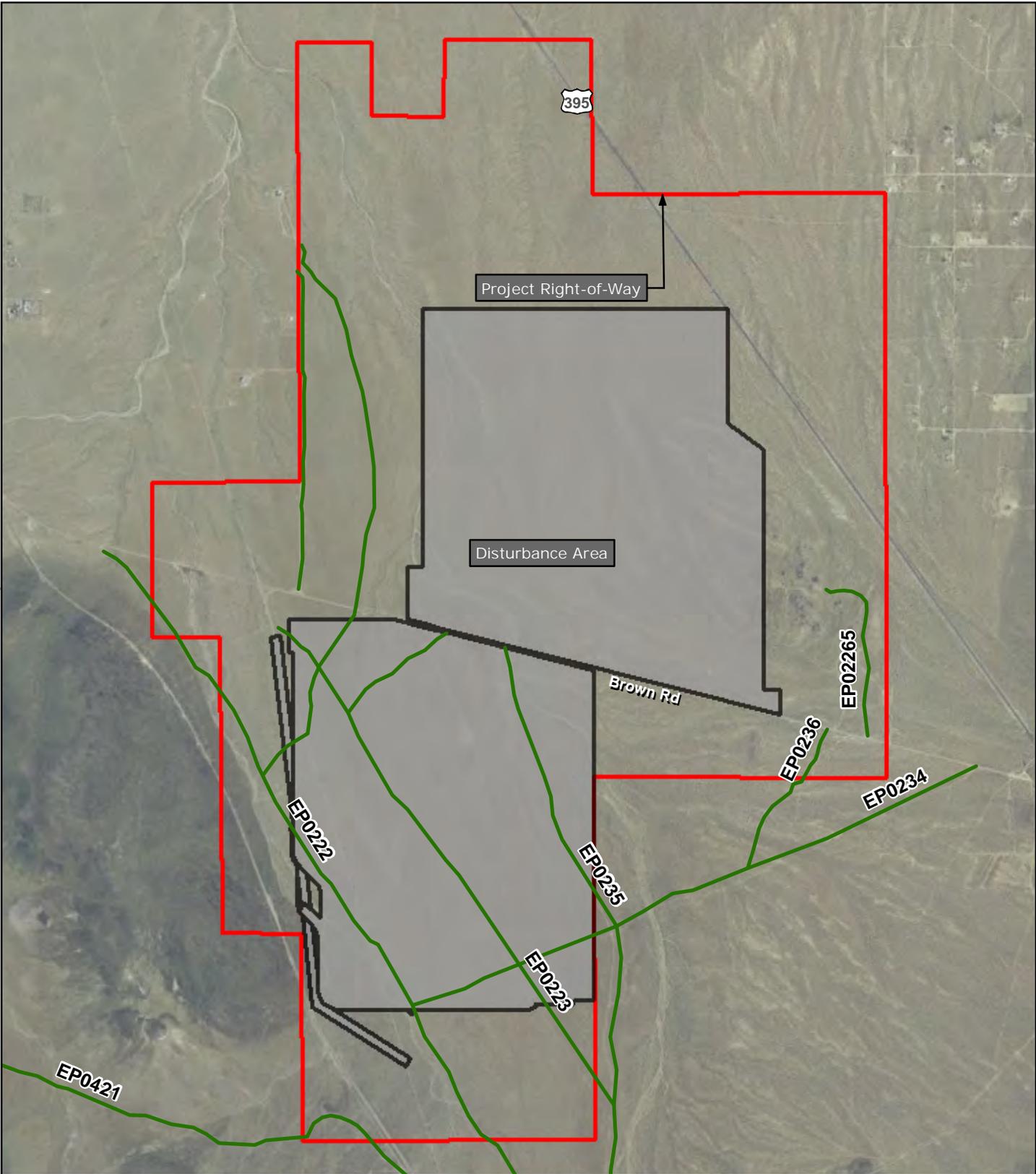


**Ridgecrest Solar Power Project**

**Figure 5.7-2**  
**BLM Multiple Use Classes**

Source: West Mojave Plan, 2005

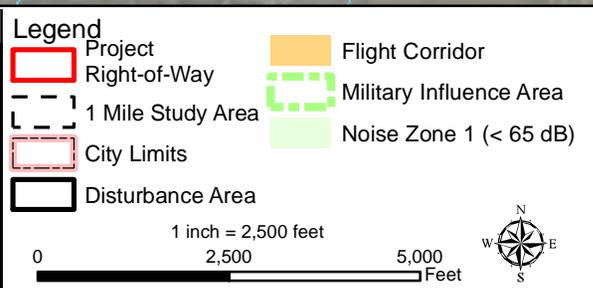
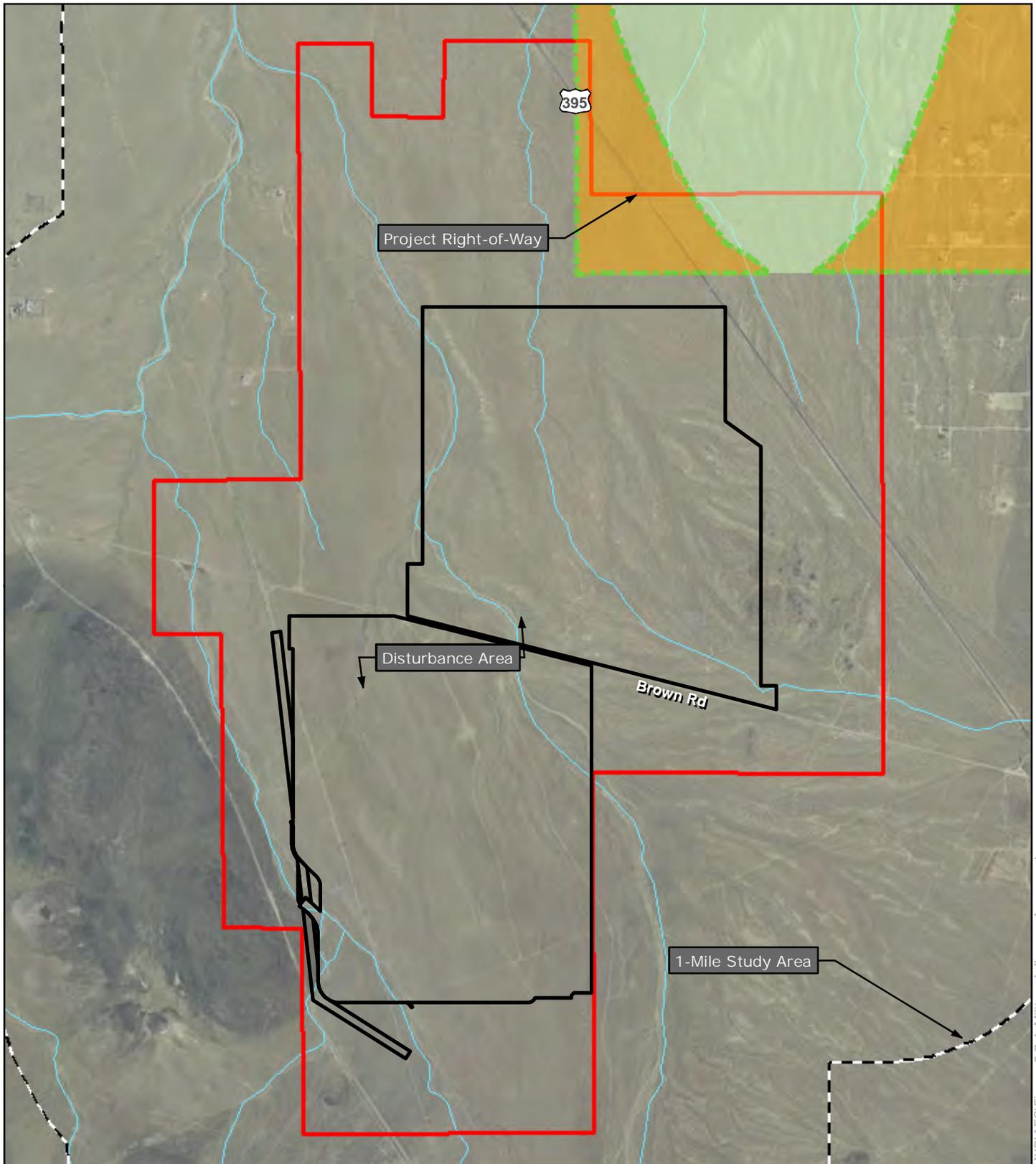
Date: September 2009



**Ridgecrest Solar  
Power Project**

**Figure 5.7-3  
El Paso OHV Trails**

Date: September 2009



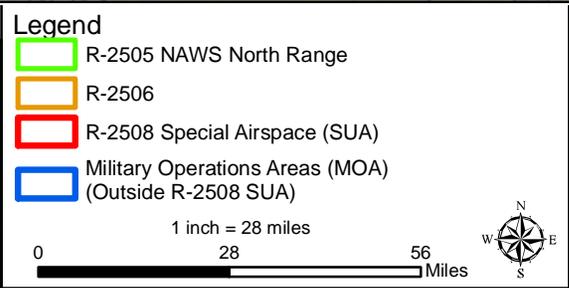
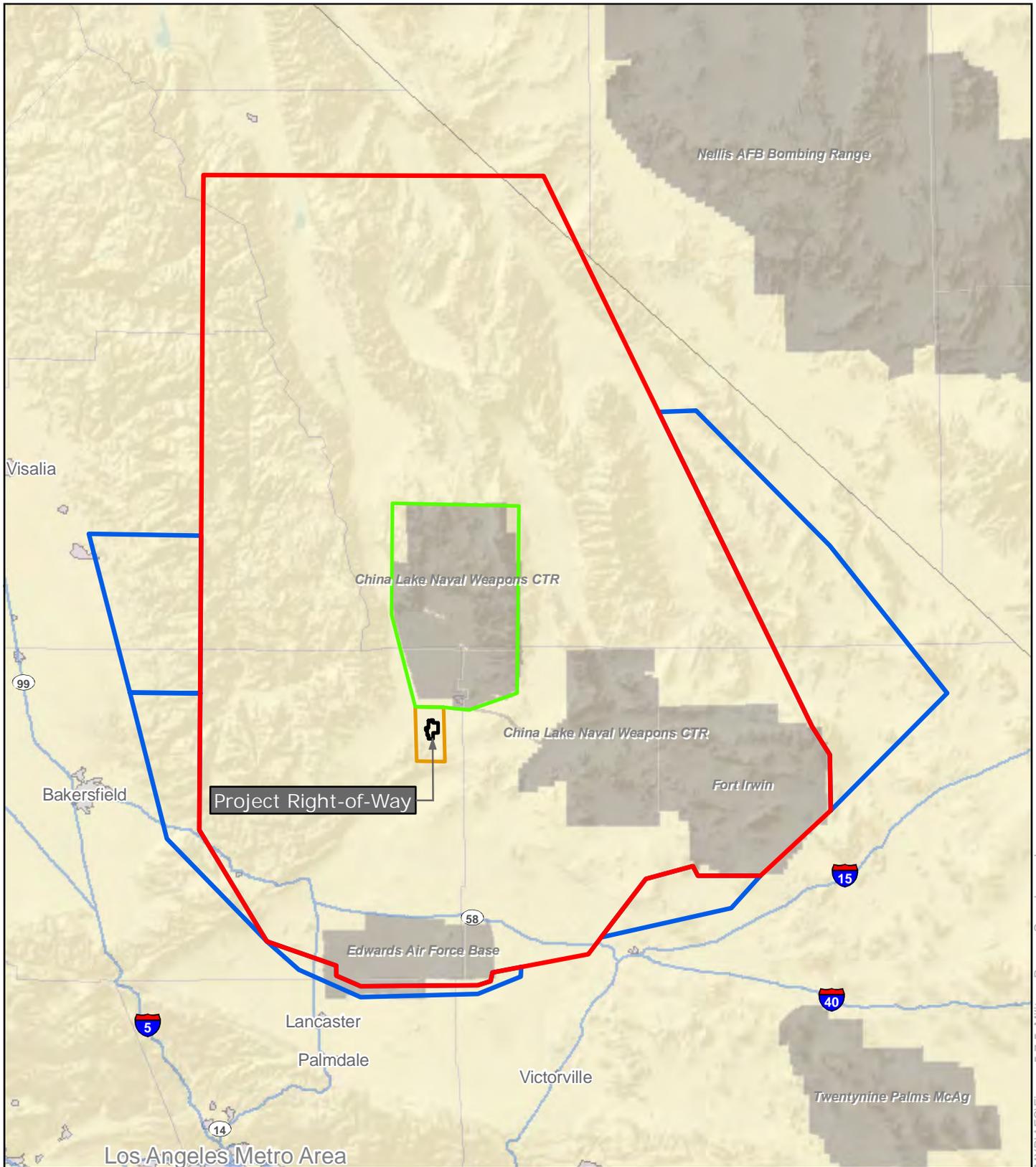
**Ridgecrest Solar Power Project**

**Figure 5.7-4  
Military Influence Areas**

Source: China Lake AICUZ Study, 2007

Date: September 2009

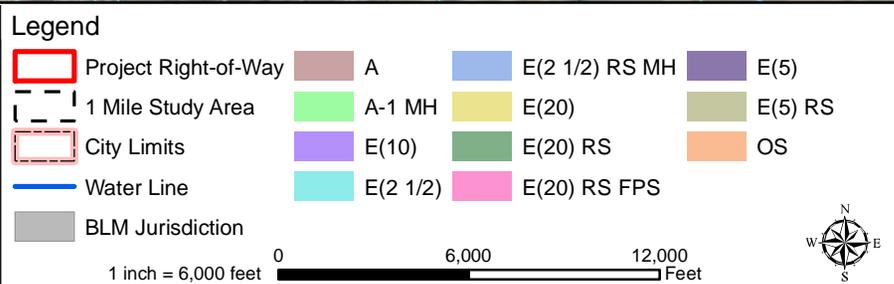
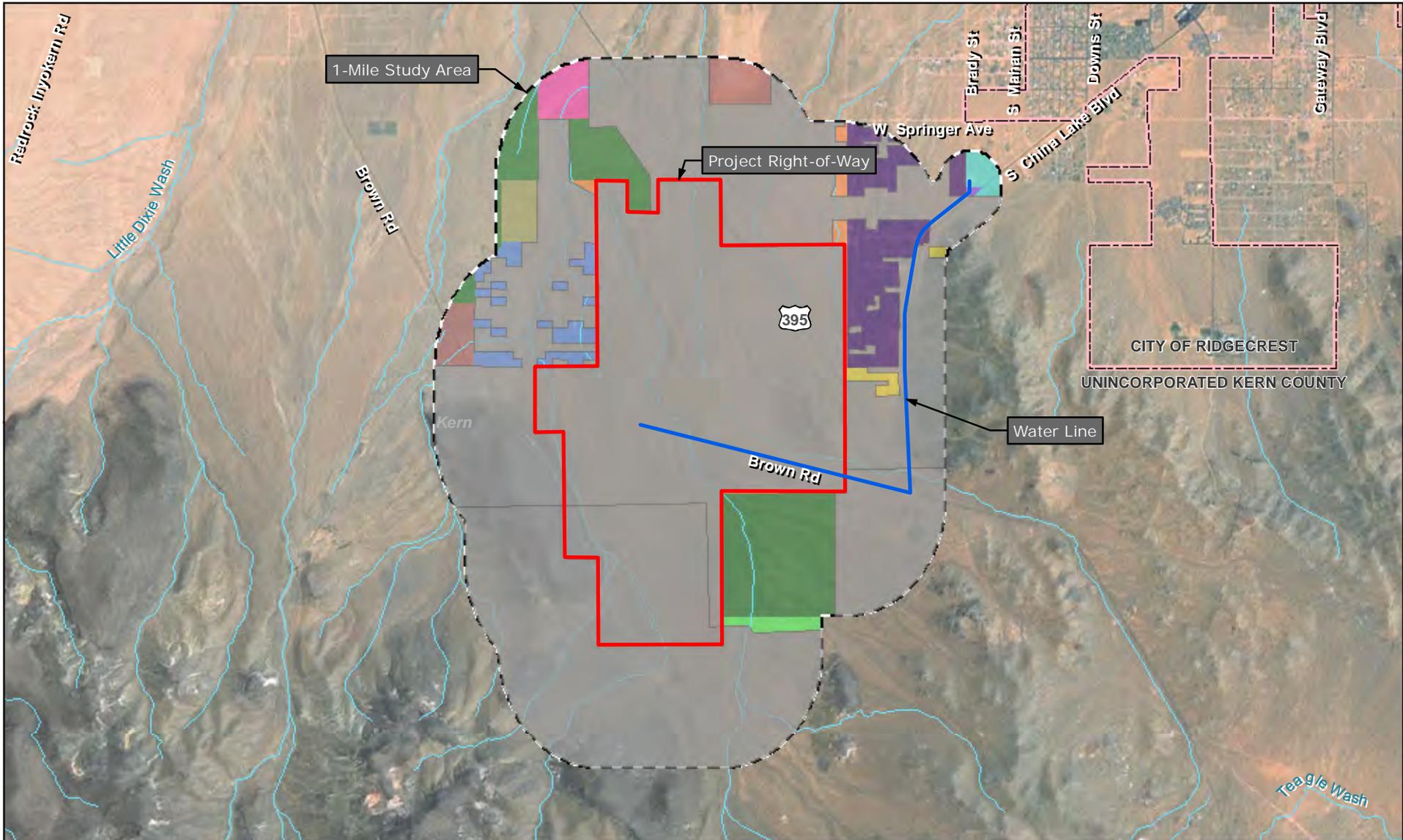
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**Ridgecrest Solar Power Project**

**Figure 5.7-5 Military Range Complex**

Date: September 2009

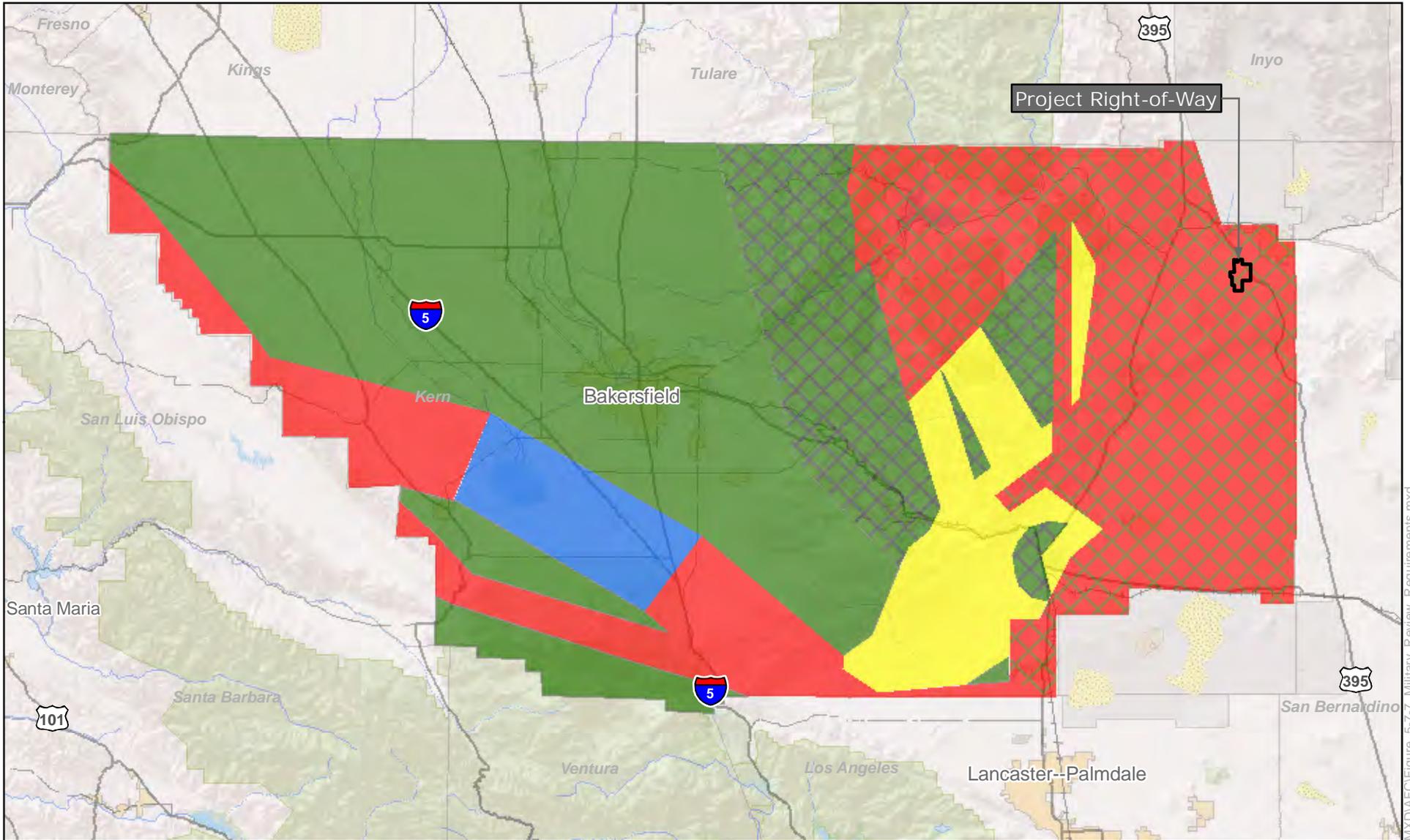


**Ridgecrest Solar Power Project**

**Figure 5.7-6**  
**Kern County Zoning**

Source: Kern County, 2009

Date: September 2009



**Legend**

All wind turbines and communication towers over 80 feet	All structures over 500 feet
All structures over 200 feet	No review requirement
All structures over 400 feet	County to provide building permit summary
	No review requirement

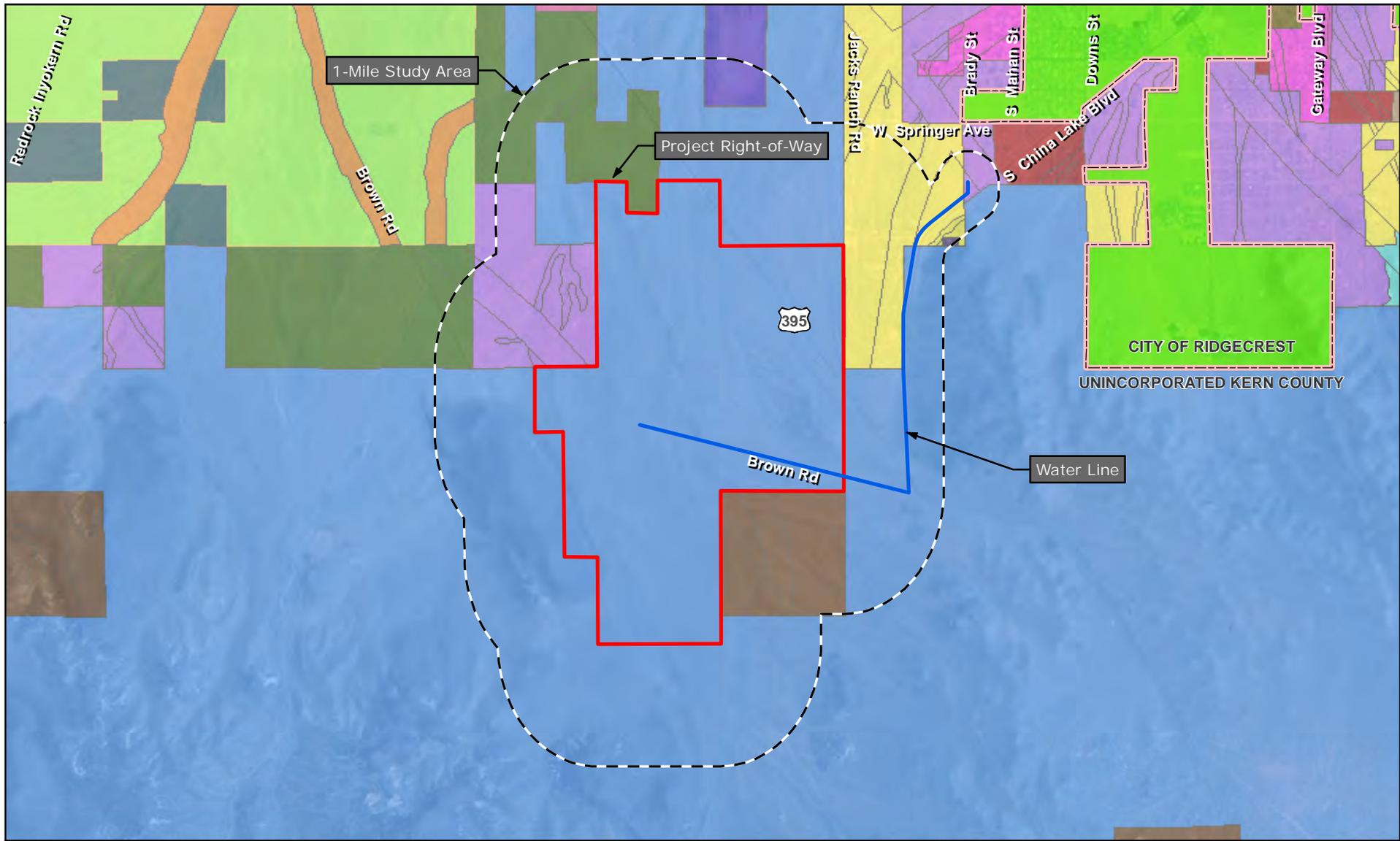
1 inch = 17 miles

**Ridgecrest Solar Power Project**  
**Figure 5.7-7**  
**Military Review Requirements**

Source: Kern County, 2009

Date: September 2009

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Project Right-of-Way	Low Density Residential	Minimum 5 Gross Acres/Unit
1 Mile Study Area	Maximum 1 Unit/Net Acre	Open Space
Water Line	Maximum 16 Units/Net Acre	Recreation
City Limits	Maximum 4 Units/Net Acre	Resource Management (Min. 20 Acre Parcel Size)
General Commercial	Mineral and Petroleum (Min. 5 Acre Parcel Size)	Solid Waste Facilities
Highway Commercial	Minimum 2.5 Gross Acres/Unit	State or Federal Land
Incorporated Cities	Minimum 20 Gross Acres/Unit	



**Ridgecrest Solar Power Project**

**Figure 5.7-8**  
**Kern County General Plan**  
**Land Use**

Source: Kern County, 2009

Date: September 2009