

DOCKETED	
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Project Title:	Gem Energy Storage Center
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Document Title:	Section 5_6_Land Use_Gem Energy Storage Center
Description:	<p>This section discusses the environmental and regulatory setting as well as, includes an analysis of potential impacts associated with the Gem Advanced Compressed Air Energy Storage (A-CAES) facility in unincorporated Kern County, California. Herein, references to the A-CAES facility equate to the location of the proposed approximately 71-acre Gem Energy Storage Center (GESC). The GESC is located approximately one mile northeast of the community of Willow Springs and seven miles west of Rosamond, California. Gem A-CAES LLC has obtained site control of the approximate 61-acre parcel by virtue of a long-term lease and is expecting to obtain site control for the 10-acre parcel.</p>
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5.6 Land Use

This section discusses the environmental and regulatory setting as well as, includes an analysis of potential impacts associated with the Gem Advanced Compressed Air Energy Storage (A-CAES) facility in unincorporated Kern County, California. Herein, references to the A-CAES facility equate to the location of the proposed approximately 71-acre Gem Energy Storage Center (GESC). The GESC is located approximately one mile northeast of the community of Willow Springs and seven miles west of Rosamond, California. Gem A-CAES LLC has obtained site control of the approximate 61-acre parcel by virtue of a long-term lease and is expecting to obtain site control for the 10-acre parcel.

The GESC will provide electricity to the existing Southern California Edison (SCE) Whirlwind Substation via an estimated 10.9-mile interconnection transmission line from the 500-megawatt (MW) A-CAES system. There are several alternative routes to the SCE Whirlwind Substation in addition to the *Preferred Route*. Los Angeles County Department of Water and Power (LADWP) has proposed construction of a substation approximately 3 miles to the south of the GESC but the timing for development of this substation is uncertain. Two possible alternative routes from the GESC to the proposed LADWP substation have been included in the analysis. Figure 5.6-1 presents the location and vicinity of the GESC site while, Figures 5.6-2 and 5.6-3 illustrate the location and vicinity of the transmission line alternatives.

The State of California requires that cities and counties adopt comprehensive, long-term general plans for physical development within their jurisdictions. The comprehensive plans include a Land Use Element (LUE) that establishes a desired pattern of appropriate land use, as well as policies and guidelines for the development of those uses. Local governments and their resource managers use local zoning ordinances, specific plans, and maps to implement the general plan's LUE. A Specific Plan is a planning document that implements the goals and policies of the general plan. Specific plans contain detailed standards for development and implementation measures to which future projects located within a specified geographic area must adhere.

Zoning ordinances include zoning maps and designations. The Revised April 2021 Kern County Zoning Ordinance presents the most recently approved zoning designations for the County. The Kern County zoning ordinance contains details about building controls, grading requirements, and regulations for the design and improvement of private and county lands within Kern County.

In accordance with Title 20 of the California Code of Regulations (CCR), this section defines the study area, also referred to as the affected environment, as those areas within 1 mile of the GESC as well as, areas within 0.25 miles of potential transmission line routes. References to the GESC study area are inclusive of the approximately 71-acre A-CAES facility site as well as, potential transmission line routes. This evaluation of land use within the study area includes the following elements: Section 5.6.1 includes a discussion regarding the environment that the project may affect; Section 5.6.2 presents an environmental analysis of project development; Section 5.6.3 discusses potential cumulative effects; Section 5.6.4 presents possible mitigation measures; Section 5.6.5 presents a description of the laws, ordinances, regulations, and standards (LORS) applicable to land use and the project; Section 5.6.6 provides a list of agencies and agency contacts for land use issues applicable to the project; Section 5.6.7 includes a description of the necessary land use permits required to construct and operate the GESC and its appurtenances; and Section 5.6.8 provides a list of references used in the preparation of this Land Use evaluation.

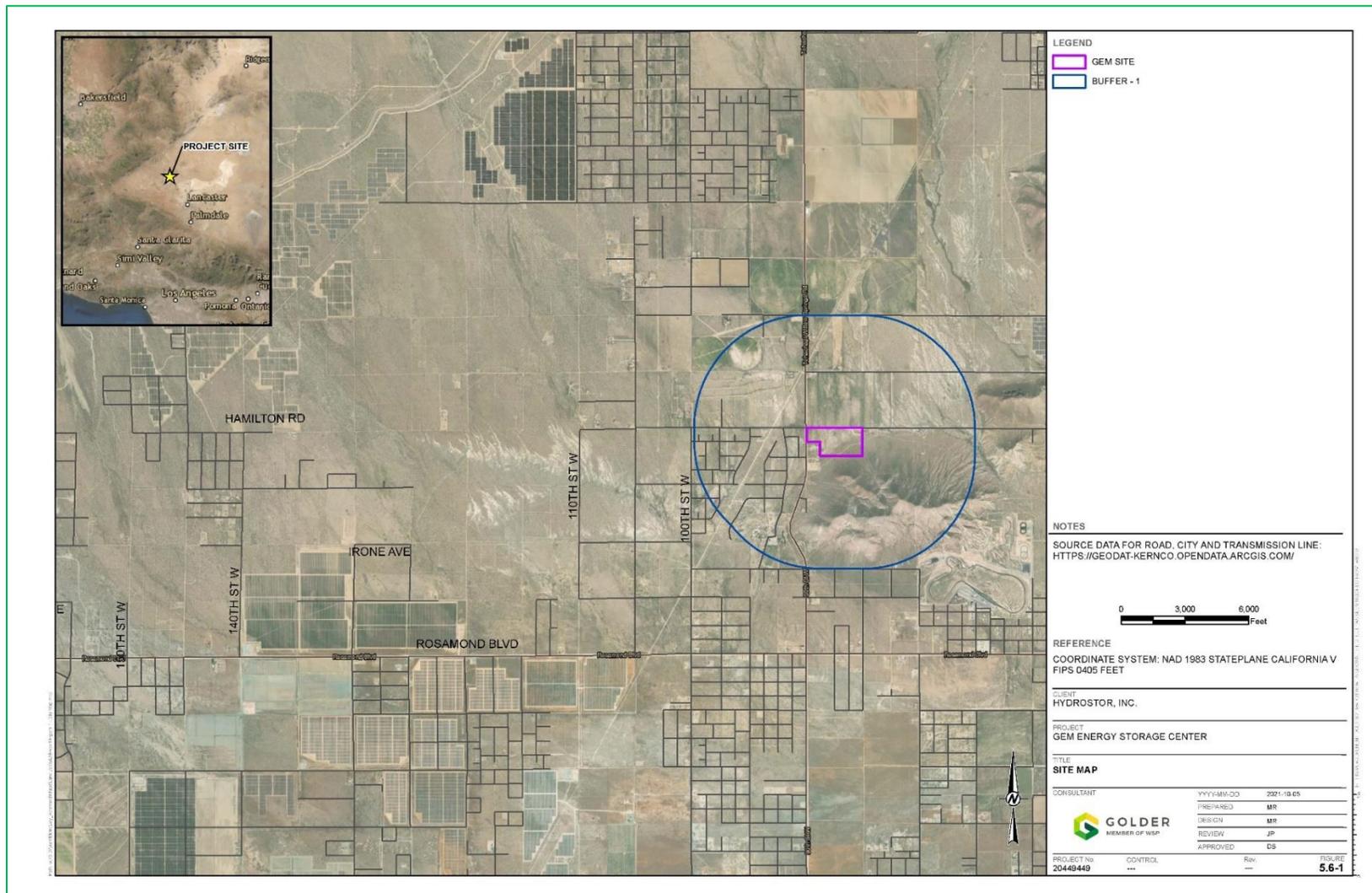


Figure 5.6-1: Site Vicinity Map with Transmission Preferred Alternative

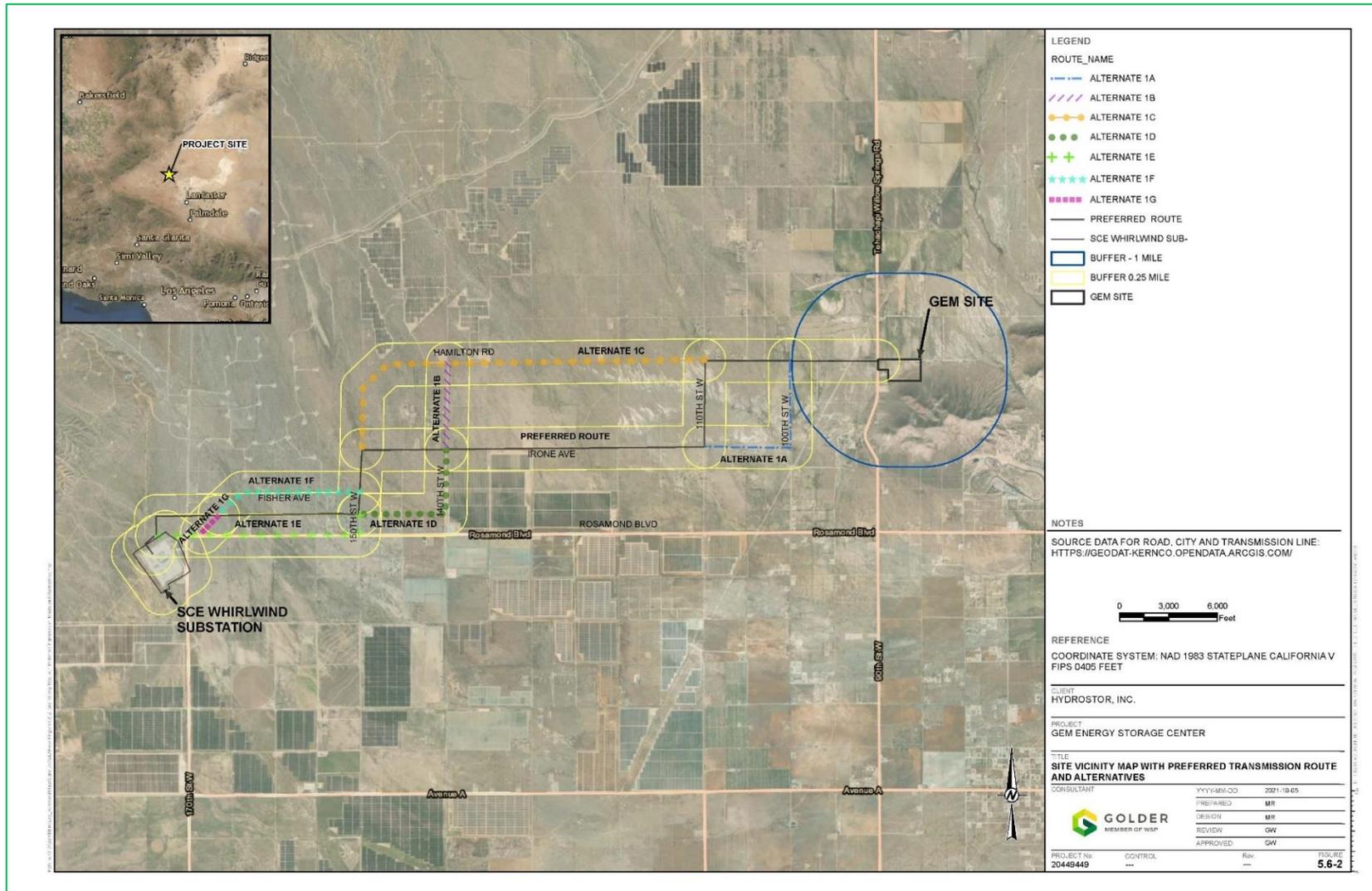


Figure 5.6-2: Site Vicinity Map for the Preferred Alternative

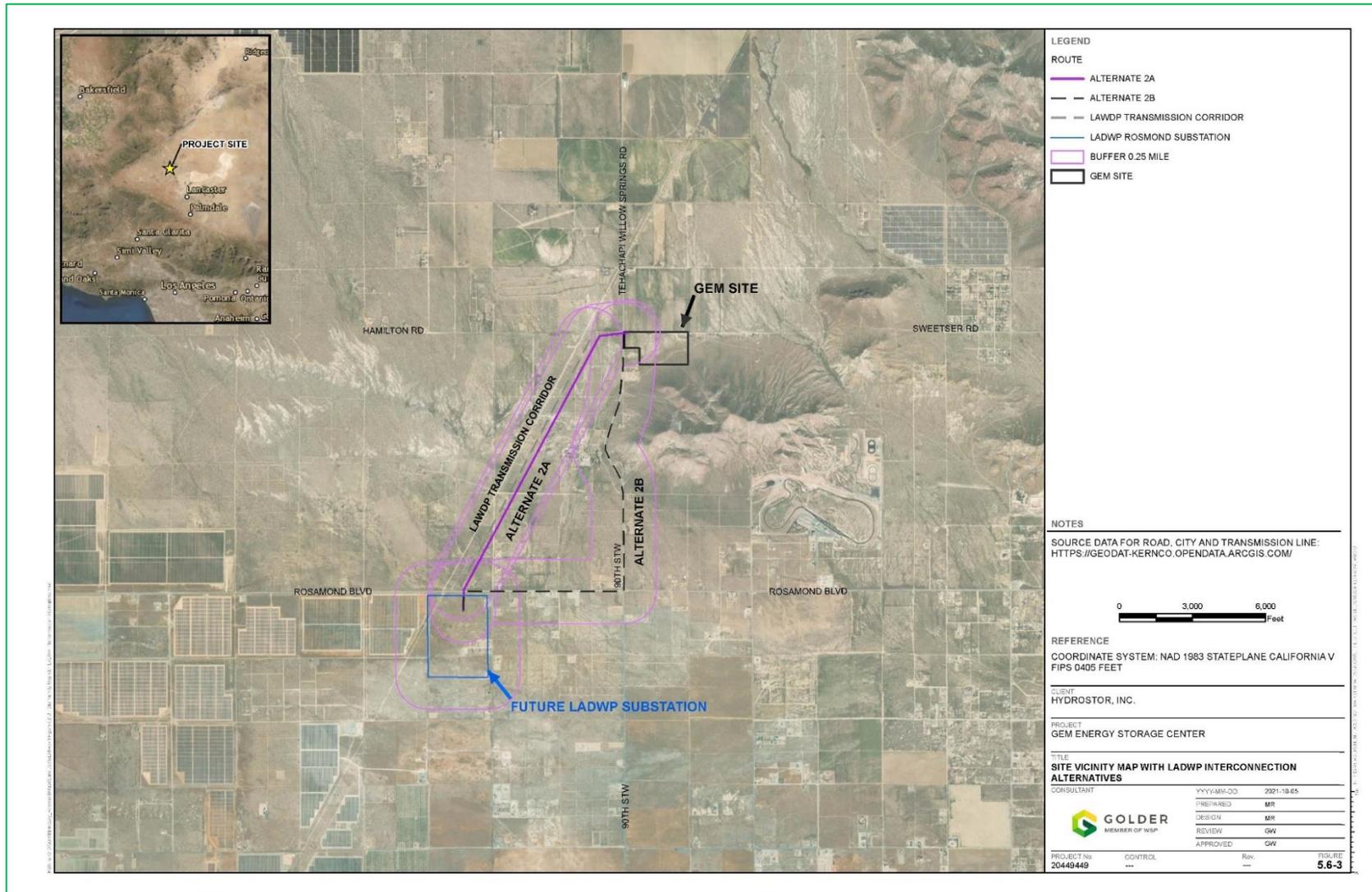


Figure 5.6-3: Site Vicinity Map for Transmission Line Alternative

5.6.1 Affected Environment

Willow Springs is in the unincorporated, southwest Kern County portion of Antelope Valley. The Willow Springs Specific Plan covers an area that is approximately 50,560-acres. The area covered under that Willow Springs Specific Plan is six miles west of Rosamond, CA and is bounded on the south by Avenue "A" (Los Angeles/Kern County Line), on the east by the alignment of 50th Street West, and on the north by a township line which is the projection of Dawn Road (Rd). The westerly boundary is a section line (190th Street West) and a northeast trending desert trail (State Road 5381 that roughly parallels the Los Angeles Aqueduct). The Willow Springs Specific Plan is part of the Land Use, Open Space, and Conservation Element of the 2008 Kern County General Plan (Kern County 2008a).

The Tehachapi Mountains lie to the northwest of Willow Springs and, because of the relatively level terrain within the study area, these mountains are visible from most all locations. The high desert environment of Willow Springs is dry, with annual precipitation measuring from two to seven inches per year. Air temperatures within Willow Springs ranges from a high of 110 to 115 degrees Fahrenheit to a low of 5-degrees Fahrenheit. The prevailing wind direction in the Willow Springs area is from the west (Kern County 2008a).

Willow Springs is an open, undeveloped land consisting of desert flora and agriculture. Commercial agriculture within the Willow Springs consists of onions, sugar beets, carrots, and alfalfa farming. A 700-foot-high butte is the most prominent feature of the landscape, but the overall topography slopes less than 5 percent from 3,000 feet down to 2,400 feet above mean sea level. Present structural development consists of approximately 214 residences scattered throughout the area along with a social saloon/grocery store and numerous renewable energy projects. Other land uses within the Willow Springs Specific Plan area include an automotive racetrack, poultry farms, private airstrips, illegal solid waste dumps, and ore mining (Kern County 2008a).

There are more than 5,000 parcels within the Willow Springs Specific Plan area. The area is largely undeveloped, with absentee owners holding 85 to 90 percent of the land divisions, which range in size from 1 to 20 acres and larger throughout the Willow Springs community (Kern County 2008a).

5.6.1.1 Existing Land Uses within the Study Area

The GESC is located entirely within the Willow Springs Specific Plan area of Kern County California. The GESC is located at the southeast corner of Tehachapi Willow Springs Rd and Hamilton Rd. Hamilton Rd becomes Sweetser Rd as it traverses east of its intersection with Tehachapi Willow Springs Rd. The associated mailing address for the two parcels that comprise the GESC is 8684 Sweetser Rd, Rosamond, CA. The two parcels are currently vacant. As a lessor, the Applicant will not be able to combine and record the affected parcels as one unit. If required by the applicable LORS, the parcels could be merged, if the two parcels are ultimately combined under common ownership. The Kern County Assessor-Recorder's property identification numbers for the parcels associated with the GESC are 315-081-09-1 and 315-081-01, respectively. **Figure 5.6-4** presents the parcels and Kern County Assessor-Recorder's parcel numbers for the properties located within and adjacent to the 1-mile GESC study area buffer.

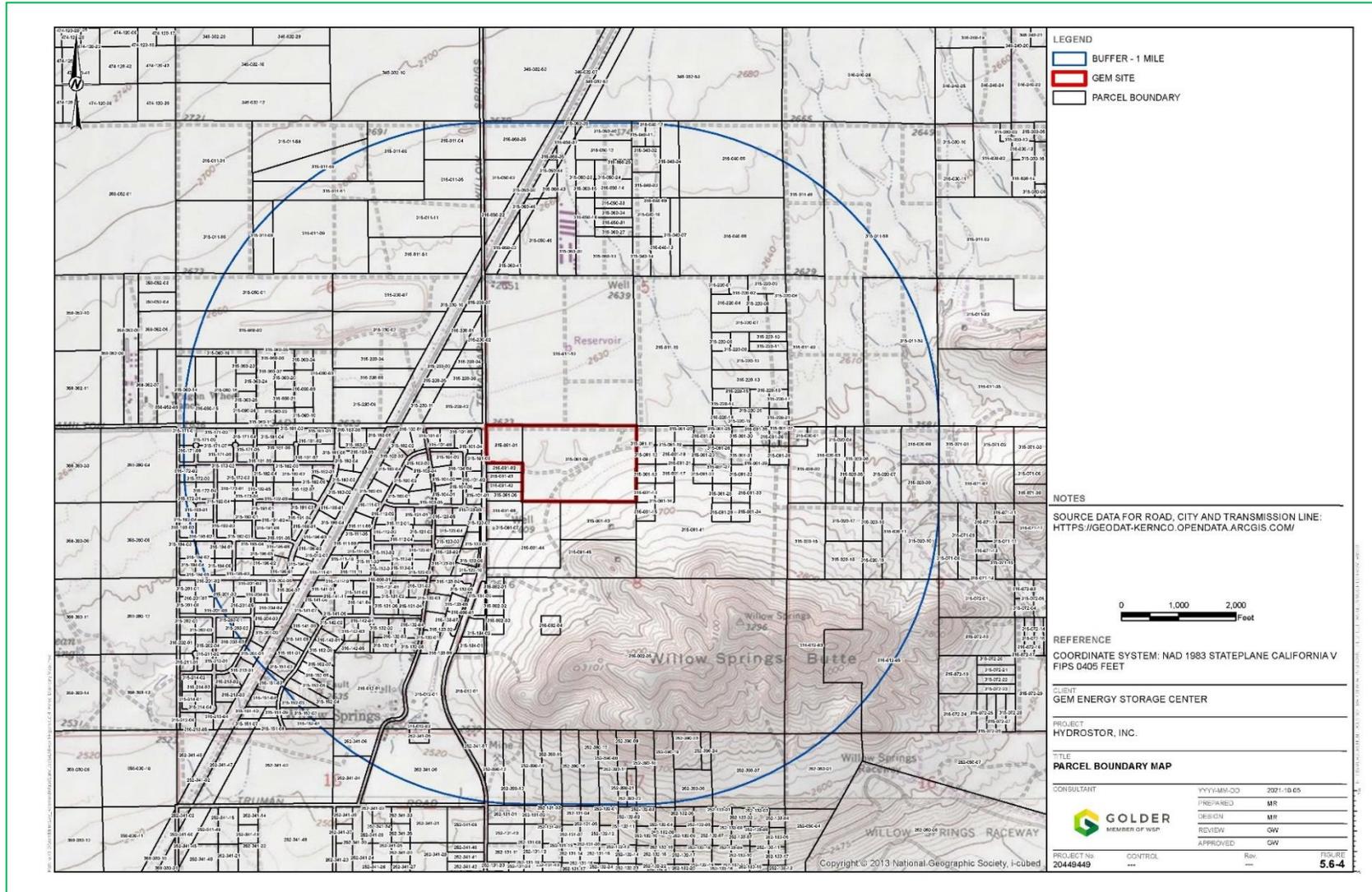


Figure 5.6-4: Parcel Boundary Map

The GESG is within Section 8 Township 9 Range 13 of Kern County, CA. Parcel 315-081-09-1 is 60.63 acres, and the corresponding Kern County Assessor-Recorder's land use code is *5000 Undeveloped Land*. Parcel 315-081-01 is 9.55 acres, and its land use code is *0080 - Land with Seven to Twenty Acres, Zoned other than Residential (R)-2, R-3, R-4, Commercial or Industrial*. **Table 5.6-1** presents current land uses for the parcels located adjacent to the GESG:

Table 5.6-1: Parcel numbers and land uses descriptions adjacent to GESG.

Adjacent Parcel ID	Land Use Code	Land Use Code Description and Zoned Land Use	Current Status
315-081-02-6	0060	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-43-0	0106	Single Family Residence on all other Zoned Land not Covered by the Above	Single Family Residence
315-081-42-2	0060 -	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-05-9	0070	Land with at least Three acres and less than Seven Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-06	0106	Single Family Residence on all other Zoned Land not Covered by the Above	Undeveloped / Vacant
315-081-44	5000	Undeveloped Land - Land with more than 20 Acres of Mountainous or Desert Nature with Little Likelihood of Development	Undeveloped / Vacant
315-081-10-9	0080	Land with Seven to Twenty Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-15	0060	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-14	0060	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-13	0060 -	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-12	0060	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-081-11	0060	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant
315-011-19	4300	Irrigated Land	Agricultural Production

Adjacent Parcel ID	Land Use Code	Land Use Code Description and Zoned Land Use	Current Status
315-011-18	4300	Irrigated Land	Agricultural Production
315-101-04	0060	Land with more than One Acre and less than Three Acres, Zoned other than R-2, R-3, R-4, Commercial or Industrial	Undeveloped / Vacant

Source: Source: Kern County Assessor-Recorder (2021): http://assessor.co.kern.ca.us/prop_search.php

As noted, GESC’s appurtenances include an interconnection transmission line that will connect the energy storage facility with SCE’s Whirlwind Substation. The existing Whirlwind Substation is located approximately 10 miles to the west of the GESC. Additional alternatives for the transmission of electricity from GESC include an interconnection transmission line to a LADWP proposed substation located approximately 3 miles south of the GESC.

The applicant is proposing to transfer electricity to substations through existing transmission line corridors that will follow alongside or cross existing roadways and traverse over undeveloped or vacant lands. Potential routes for an interconnection transmission line occur within areas that maintain the following legal descriptions (Kern County Assessor-Recorder 2021):

- Section 4 Township 9 Range 14
- Section 7 Township 9 Range 13, 14
- Section 8 Township 9 Range 13
- Section 9 Township 9 Range 14
- Section 10 Township 9 Range 14
- Section 11 Township 9 Range 14
- Section 12 Township 9 Range 14
- Section 13 Township 9 Range 15
- Section 14 Township 9 Range 15
- Section 17 Township 9 Range 13
- Section 18 Township 9 Range 13, 14
- Section 23 Township 9 Range 15
- Section 24 Township 9 Range 15

Figure 5.6-1 and Figure 5.6-2 illustrate the various elements of the local and regional roadway transportation system as well as, the project’s location and potential transmission line routes (Preferred Transmission Route and Transmission Alternative Routes). The main transportation corridors that connect the GESC to the region include the following:

- Sierra Highway (Hwy) (State Hwy 14) located north of GESC, connects the Community of Rosamond, CA with the City of Mojave, CA
- State Hwy 58, located to the north of GESC, connects the City of Bakersfield, CA to City of Mojave, CA
- The Antelope Valley Hwy (State Hwy 14), located east and south of GESC, connects the Community of Rosamond, CA with the City of Lancaster, CA
- The Antelope Valley Freeway (State Hwy 14), located to the south of GESC, connects the City of Lancaster with Interstate Hwy-5 just north of the City of Los Angeles, CA

Local improved roadways within the GESC study area include Hamilton Road (aka Sweetser Road), Tehachapi Willow Springs Road, and Rosamond Blvd. The following describes how the local roadway system connects to the regional network:

- Tehachapi Willow Springs Road intersects with Rosamond Blvd. approximately 2 miles south of Hamilton Rd
- Rosamond Blvd intersects State Hwy 14 in the Community of Rosamond, CA
- Tehachapi Willow Springs Road connects to State Hwy 58 near the City of Tehachapi south-east of Bakersfield, CA

In addition to improved roadways, various unimproved roadways exist throughout the study area and the community of Willow Springs.

5.6.1.2 Specific Land Uses within the Gem Study Area

This section provides a description of land uses located near GESC as well as, potential interconnection transmission line routes. The specific land use review extended 1 mile from the location of the GESC and 0.25 miles from potential siting routes for an interconnection transmission line between the GESC and SCE's Whirlwind Substation or LADWP's proposed substation.

5.6.1.2.1 Industrial

As shown on Figure 5.6-1, GESC is in a sparsely populated portion of Kern County. The parcels proposed for the siting of the GESC facility are currently vacant. As noted in Table 5.6-1, the parcels surrounding the GESC are currently either undeveloped, developed with single family residences, or designated for agricultural purposes. Parcels with similar designations surround each of the potential transmission line routes. Throughout the study area, several solar and wind farms parallel potential transmission line Rights of Way (ROW). Facilities such as metal processing, glass and pipe manufacturing, and automobile repair and storage do not currently exist within the study area.

5.6.1.2.2 Commercial/General Office

There are currently no commercial or general offices within the GESC study area.

5.6.1.2.3 Residential

Figure 5.6-1 illustrates the sparsely populated study area. There are only a few single-family residences adjacent to the GESC as well as, the potential transmission line routes. The homes closest to the GESC are situated as follows:

- **Parcel 315-081-43-0:** This residence is located approximately 350 feet to the west
- **Parcel 315-101-03:** This residence is located approximately 750 feet to the west
- **Parcel 315-081-07:** This residence is located approximately 500 feet to the southwest
- **Parcel 315-081-19:** This residence is located approximately 420 feet to the east (Kern County Assessor-Recorder 2021)

5.6.1.2.4 Agricultural Use

The California Department of Conservation (CDOC), Farmland Mapping and Monitoring Program (FMMP) developed categorical definitions of important farmlands for land inventory purposes. Important farmlands provide the best opportunity for agricultural production. Figure 5.6-5 illustrates the CDOC farmland designations for the project vicinity. According to the 2018 Kern County Important Farmland Map, the CDOC has designated the study area largely as Nonagricultural and Natural Vegetation (CDOC, 2018). The FMMP Rural Land Mapping Project defines Nonagricultural and Natural Vegetation as:

“Heavily wooded, rocky/barren areas, riparian and wetland areas, grassland areas which do not qualify as Grazing Land due to their size or land management restrictions, small water bodies and recreational water ski lakes. Constructed wetlands are also included in this category (CDOC 2019).”

Adjacent to the GESC and located on the north side of Hamilton Rd, the 2018 Kern County Important Farmland map designated parcels 315-011-19 and 315-011-18 as Farmland of Statewide Importance (CDOC 2018). The FMMP defines Farmland of Statewide Importance as:

“farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date (CDOC 2021).”

Beginning in 1965 with the California Land Conservation Act, local governments have been permitted to enter into contracts with private landowners for the purpose of retaining agricultural and open space uses. Resource managers refer to these contracts as Williamson Act contracts. The minimum term for a Williamson Act contract is ten years. There are no active Williamson Act contracts within or adjacent to the study area. In 2010, two parcels (358-111-25 and 358-111-23) within the study area were under Williamson Act contracts, and they were located adjacent to an existing transmission line ROW that extends alongside Hamilton Rd a few miles west of the GESC (Kern County GIS 2021).

5.6.1.2.5 Recreation

Although there are no recreational facilities within the study area, the off-road trails used by riders and drivers visiting the Willow Springs International Motor Sports Park do extend into the GESC’s 1-mile study area buffer. The main Willow Springs International Motor Sports Park facility and its tracks are located approximately 1.5 miles southeast of the GESC. The Willow Springs International Motor sports Park is a 600-acre complex that includes the following: Willow Springs Raceway (2.5-mile road course), The Streets of Willow Springs (a 1.8-mile road course), Walt James Stadium (3/8 mi Clay Oval and Paved Oval), Willow Springs Speedway (a lighted 1/4-mile paved oval), Willow Springs Kart Track (a .625-mile, 9-turn paved sprint track), The Balcony (a 1/4-mile paved autocross and drifting track), The Horse Thief Mile (1-mile canyon road course with many elevation changes and tight corners), and 160 acres of off-road trails that riders’ access from the motor sports park. The Willow Springs

International Motor Sports Park off-road riding trails do not extend to within the 0.25-mile study area buffer surrounding potential interconnection transmission line routes.

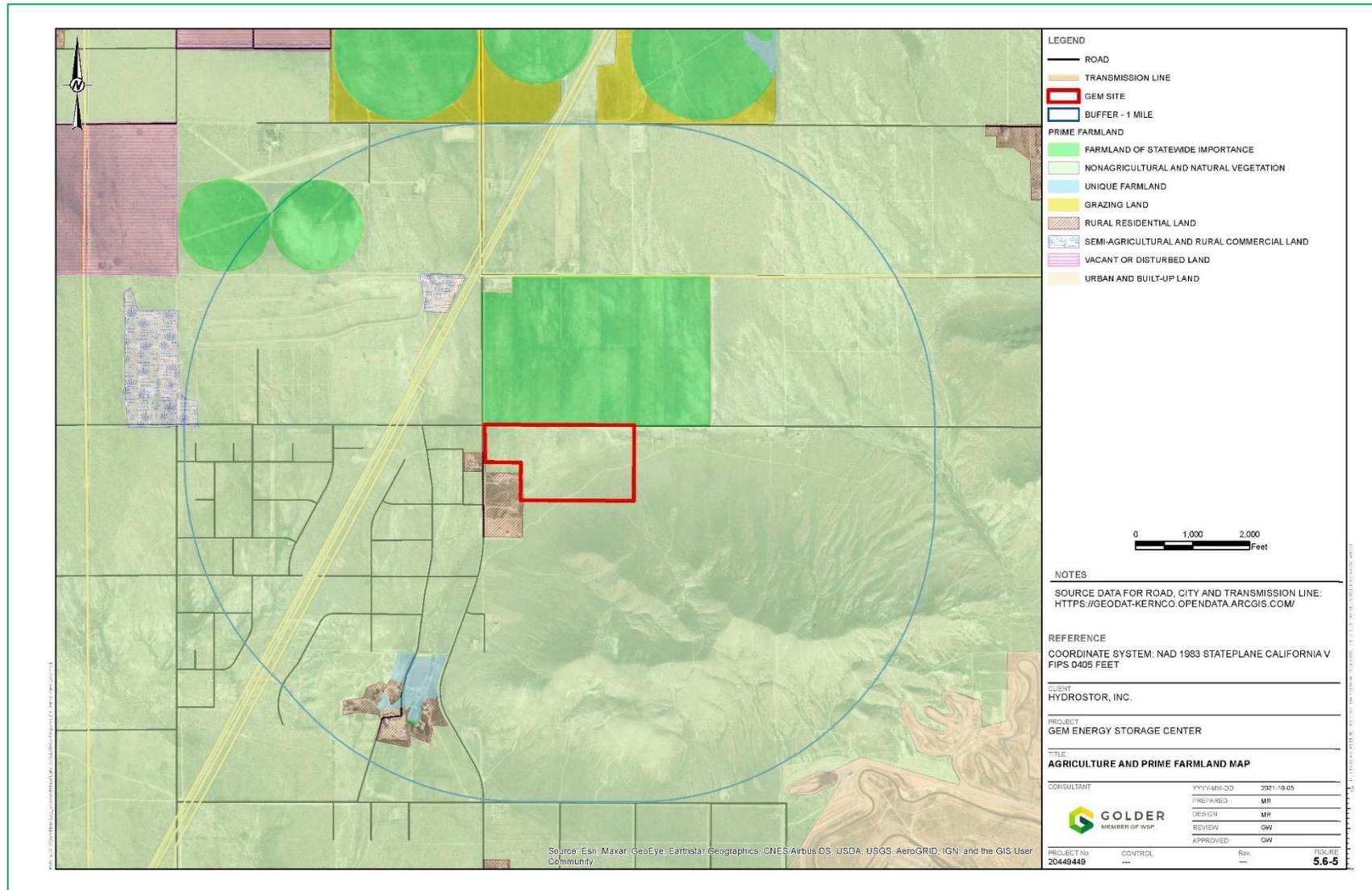


Figure 5.6-5: Agriculture and Prime Farmland Map

5.6.1.2.6 Open Space

Under Section 65560 of the State Government Code, open space is defined as any parcel or area of land or water that is essentially unimproved and devoted to an open-space use, and that is designated on a local, regional, or state open space plan as any of the following: open space for the preservation of natural resources, open space used for the managed production of resources, open space for outdoor recreation, or open space for public health and safety.

The Willow Springs Specific Plan area consists of Antelope Valley Desert land with land uses ranging from agriculture, mineral extraction, and open space to various urban uses. According to the Willow Springs Specific Plan, the open space character of Willow Springs exists because rural residential development has not occurred. Most of Willow Springs' resource lands are presently zoned Estate 2 ½ acres (E 2 1/2). The E 2 1/2 designation is for larger-lot, single-family residential development with uses typical of and compatible with quiet residential neighborhoods (Kern County 2008a).

Other than the sparsely populated single-family residences and parcels developed for solar and wind energy production, vacant land occurs throughout the study area. Within the study area, parcels that meet the State of California's definition of open space are lands associated with agricultural production. A review of the Kern County assessor's database indicates that most vacant lands within the study area maintain multiple land use designations that align with future development.

5.6.1.2.7 Scenic Areas

There are no designated scenic resources within the study area. The character of the GESC study area is determined largely by existing land uses such as agriculture, vacant lots, and renewable energy production. Kern County California has three candidate scenic highways and no designated scenic highways. The closest candidate scenic highway is Route 14 from near the City of Mojave to the City of Barstow; however, it is more than 10 miles from the GESC and its appurtenances. The candidate scenic highways include the following:

- Route 14 from near the City of Mojave to the City of Barstow
- Route 14 near Little Lake to Route 89 near Coleville
- Route 46 as it traverses Kern County. Neither of the three candidates are within the study area. (California Department of Transportation 2021)

5.6.1.2.8 Natural Resource Protection

The project site is located within the West Mojave Plan (WMP) Habitat Conservation Plan (HCP) area. The WMP includes 3.6 million acres of public land and 2.8 million acres of private land in the West Mojave Desert of San Bernardino, Kern, Inyo, and Los Angeles Counties. All public lands of the WMP are within the California Desert Conservation Area managed by the Bureau of Land Management. The WMP consists of two components: a federal component that will amend the existing 1980 California Desert Conservation Area Plan, and an HCP that will cover development on private lands within the region. The WMP is a proposed comprehensive strategy to conserve and protect listed or sensitive wildlife species and their habitats. Although the applicable state and federal agencies have not yet prepared the HCP, the intent of the plan will be to provide a program for complying with the federal Endangered Species Act on private lands within the WMP's boundaries (Bureau of Land Management 2005).

5.6.1.2.9 Educational/Child Care/Nursing Home

There are no educational facilities within the study area. The study area is within the Southern Kern Unified School District. The nearest educational facility is Tropico Middle School which is located approximately 6.1 roadway miles to the southeast of the GESC and study area. There are no registered childcare facilities within the study area. The Community of Rosamond, CA maintains multiple childcare facilities with a *Genuine Start WeeCare Day Care* facility located approximately 8.8 roadway miles east southeast of the GESC and study area. There are no nursing homes within the study area. The Community of Rosamond, CA maintains two senior living communities while, the nearest nursing home is in the City of Lancaster, CA. The City of Lancaster is more than 22 roadway miles from the study area. Rosamond Hills Senior Community is 9.8 roadway miles from the GESC and study area.

5.6.1.2.10 Religious

There are no religious facilities within the study area. The surrounding communities contain multiple religious institutions with the nearest being Epistol Adelanto and New Life Church of God in Christ. The religious facilities are approximately 3 miles and 6 miles away from the GESC and study area, respectively.

5.6.1.2.11 Cultural and Historic

Section 5.3, Cultural Resources, provides a discussion of cultural and historic resources in the study area, including implementation of standard mitigation measures to address incidental discovery of resources during construction of the GESC and interconnection transmission line.

5.6.1.2.12 Unique Land Uses

This assessment has identified no unique land uses within the study area. The main Willow Springs International Motor Sports Park facility and its tracks are located outside the GESC study area. Rider's access off-road mountainous trails located within the study area's 1-mile buffer.

5.6.1.3 General Plan Land Use Designations

5.6.1.3.1 General Plan Land Use Designations within the Study Area

Land use provisions included in every California city and county general plan reflect the goals and policies that guide physical development of land within their jurisdiction (California State Planning Law, Government Code Section 65302 et seq.). This section describes the land use designations for properties located within the study area. Figure 5.6-6 shows the general plan land use designations within the study area, and Table 5.6-2 describes these designations.

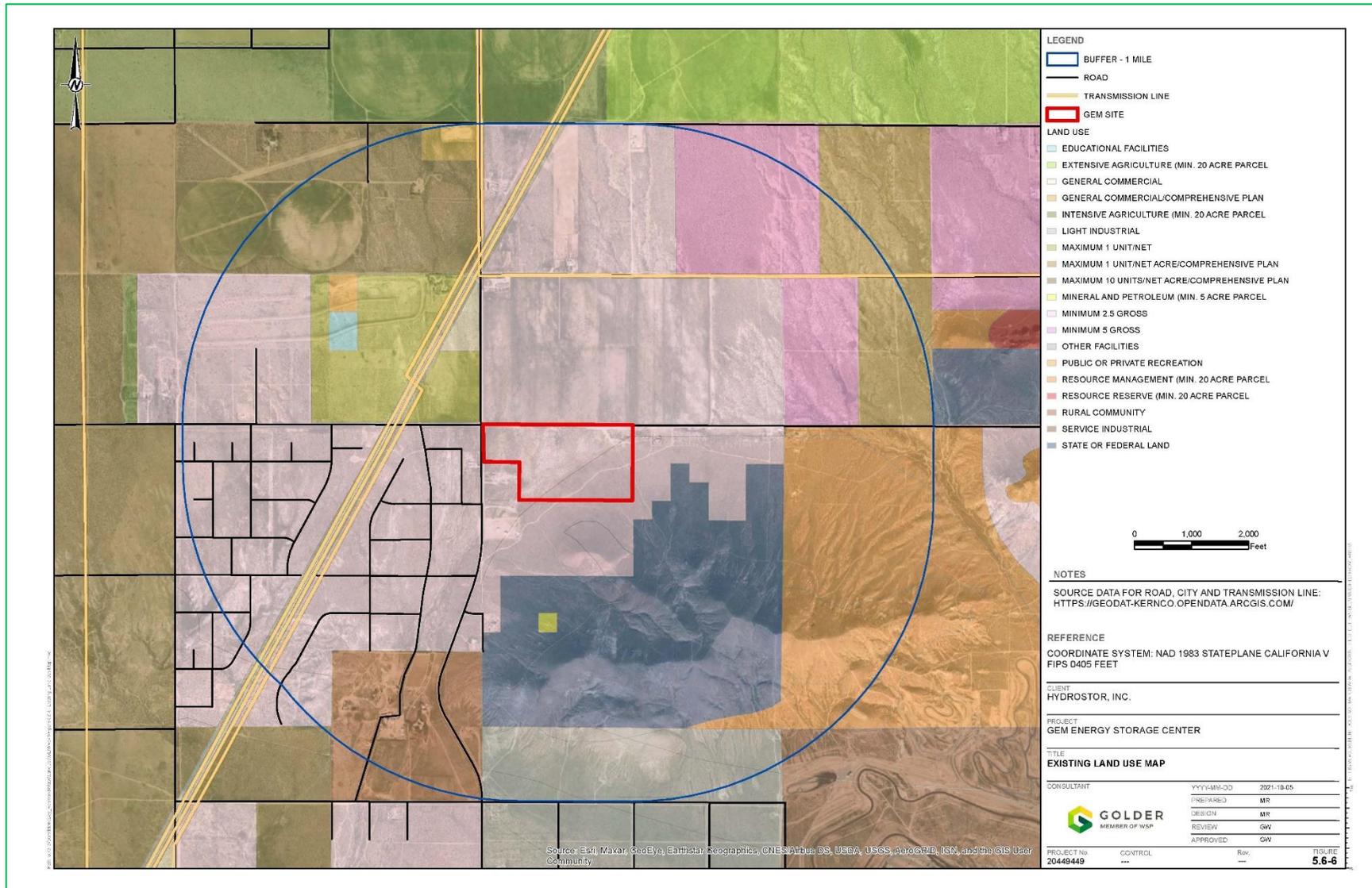


Figure 5.6-6: Existing Land Use Designation Map

Table 5.6-2: General land use designations within the Study Area

General Plan Land Use No.	General Plan Land Use Designation	Description	Minimum Parcel Size
1.1	State or Federal Land	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, Bureau of Land Management, Department of Energy, etc.).	The General Plan lists no desired character and uses and does not provide for a development intensity.
3.2	Educational Facility	Existing public and private educational facilities. Permitted uses include, but are not limited to, public and private educational facilities of all levels, including higher education institutions, and some recreational facilities, such as neighborhood parks.	The General Plan does not provide for a development intensity.
3.3	Other Facilities	Existing facilities used for public or semi-public services. Permitted uses include, but are not limited to, airports, sewer farms, treatment plants, and water spreading areas.	The General Plan does not provide for a development intensity.
4.1	Accepted County Plan Areas	A designation of areas for which specific land use plans have already been prepared and approved. These plans are accepted and incorporated by this reference and the respective land use map associated with each such plan is hereby adopted as the General Plan diagram for each such area. Each plan area is indicated on the General Plan map.	The General Plan lists no desired character and uses and does not provide for a development intensity.
5.6	Minimum 2.5 Gross	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.	Under the designation of residential rural single-family development, the General Plan requires a minimum of 2.5 gross acres per unit.
5.7	Minimum 5 Gross	Designated in the outlying, less densely settled areas, often characterized with physical constraints, and not requiring connections to public water and sewer infrastructure	Under the designation of residential rural development, the General Plan requires a minimum of 5 gross acres per unit.
6.2	General Commercial / Comprehensive Plan	Uses shall include, but are not limited to, the following: Neighborhood shopping centers, convenience markets, restaurants, offices, wholesale business facilities, resort hotels and motels, hospitals, schools (including trade schools), churches, and commercially related light manufacturing or storage within fully enclosed facilities.	Retail and service facilities of less intensity than regional centers (20 acres) providing a broad range of goods and services which serve the day-to-day needs of nearby residents.

General Plan Land Use No.	General Plan Land Use Designation	Description	Minimum Parcel Size
7.2	Service Industrial	Commercial or industrial activities which involve outdoor storage or use of heavy equipment. Such uses produce significant air or noise pollution and are visually obtrusive. Uses shall include, but are not limited to, the following: Automobile and truck parking, storage, and repair shops, freighting or trucking yards, bottling plants, breweries, welding shops, cleaning plants, and other manufacturing and processing activities.	The General Plan does not provide for a development intensity.
8.4	Mineral or Petroleum	Areas which contain producing or potentially productive petroleum fields, natural gas, and geothermal resources, and mineral deposits of regional and Statewide significance. Uses are limited to activities directly associated with the resource extraction. Uses shall include, but are not limited to, the following: Mineral and petroleum exploration and extraction, including aggregate extraction; extensive and intensive agriculture; mineral and petroleum processing (excluding petroleum refining); natural gas and geothermal resources; pipelines; power transmission facilities; communication facilities; equipment storage yards; and borrow pits.	The General Plan requires a minimum parcel size is five acres gross.
8.5	Resource Management	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. Uses shall include, but are not limited to, the following: Recreational activities; livestock grazing; dry land farming; ranching facilities; wildlife and botanical preserves; and timber harvesting; one single-family dwelling unit; irrigated croplands; water storage or groundwater recharge areas; mineral; aggregate; petroleum exploration and extraction; open space and recreational uses; one single-family dwelling on legal residentially zoned lots on effective date of this General Plan; land within development areas subject to significant physical constraints; State and federal lands which have been converted to private ownership.	The General Plan requires a minimum parcel size is 20 acres gross, except lands subject to a Williamson Act Contract/Farmland Security Zone Contract, in which case the minimum parcel size shall be 80 acres gross.

Source: Kern County General Plan. <https://kernplanning.com/planning/planning-documents/general-plans-elements/>. Website Accessed July 28, 2021.

5.6.1.3.2 General Plan Land Use Designations, GESC

The 2008 Kern County General Plan designates the GESC as 4.1 Accepted County Plan Areas. The General Plan describes these designations as follows:

“A designation of areas for which specific land use plans have already been prepared and approved. These plans are accepted and incorporated by this reference and the respective land use map associated with each such plan is hereby adopted as the General Plan diagram for each such area. Each plan area is indicated on the General Plan map”

The 2008 Willow Springs Specific Plan designates GESC parcels 315-081-09-1 and 315-081-01 as 8.5 Resource Management (20 acre minimum). The 2008 Willow Springs Specific Plan states the following about areas designated as 8.5 Resource Management (20 acre minimum):

“Primarily open space lands containing important resource values, such as wildlife habitat, scenic values, or watershed recharge areas.”

The 2008 Willow Springs Specific Plan states the following about areas designated as 8.5 Resource Management: designated in the outlying, less densely settled areas, often characterized by areas with physical constraints and not requiring connections to public water and sewer infrastructure.

5.6.1.4 Study Area Zoning

Zoning codes provide specific requirements related to land use and the density and intensity of development. Figure 5.6-4 depicts the zoning districts in the study area. Table 5.6-3 provides definitions and information about the zoning districts within the study area. The existing land division pattern reflects the existing zoning classification, established in 1970, of E (2 1/2) RS (formerly A-1 and A-2) (Kern County 2008a).

Table 5.6-3: Zoning districts within the Study Area

ZONE TITLE	TYPICAL USES	MINIMUM PARCEL SIZE
Estate - 2 1/2 acres	Larger-lot, single-family residential development; uses typical of and compatible with quiet residential neighborhoods	2 1/2 acres

Source: Kern County Willow Springs Specific Plan. <https://kernplanning.com/planning/planning-documents/specific-plans/>. Website accessed July 28, 2021.

5.6.1.5 Project Site and Linear Zoning

The GESC and potential transmission line routes are located on parcels with the following zoning designations:

- Estate 2.5 acres, residential suburban combining,
- Estate 2.5 acres, residential suburban combining, floodplain secondary combining,

As stated in the Revised April 2021 Kern County zoning ordinances,

“the purpose of the Estate (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. The minimum lot size shall be one-quarter (1/4) acre (10,890 square feet) unless the E District is combined with the Lot Size Combining District (Chapter 19.54 of this title) where a larger minimum lot size is specified. The minimum lot size may be reduced when any E District is combined with the Cluster (CL) Combining

District (Chapter 19.58 of this title). Agricultural uses permitted in the E District are accessory uses and shall not be established until a primary use is established (Kern County 2021)."

Permitted Land Uses Associated with the Estate Zoning Designation

The following uses and all others determined to be like these uses pursuant to Sections 19.08.030 through 19.08.080 of this title are permitted in the E District:

Agricultural Uses, Residential Uses, Commercial Uses, Utility and Communication Facilities, Resource Extraction and Energy Development Uses, and various miscellaneous uses (Kern County 2021).

The 2021 Kern County Zoning Ordinance defines the allowable uses as follows:

- **Agricultural Uses:** Breeding and raising animals pursuant to Section 19.16.130 of this chapter. Growing of agricultural crops for domestic use of the resident/occupant. Community garden pursuant to Section 19.16.130 of this chapter.
- **Residential Uses:** Accessory dwelling unit, pursuant to Chapter 19.90. Manufactured home, mobile home, or recreational vehicle, temporary, during construction of a single-family home pursuant to Section 19.16.130 of this chapter.
 - Manufactured home, pursuant to Section 19.16.130.E of this chapter. Residential accessory structures
 - Residential facility, serving six (6) or fewer persons
 - Single-family dwelling, with a width greater than sixteen (16) feet
- **Commercial Uses:** Offices for temporary on-site real estate tract sales, including commercial coaches, pursuant to Subsection 19.16.130.D of this title.
- **Utility and Communication Facilities:** Transmission lines and supporting, towers, poles, and underground facilities for gas, water, electricity, telephone, or telegraph service owned and operated by a public utility company under the jurisdiction of the California Public Utilities Commission pursuant to Section 19.08.090 of this title.
- **Resource Extraction and Energy Development Uses:** Solar energy electrical generator which is accessory to a permitted or conditionally permitted use and where the power generated does not exceed the total on-site power demand. Additionally, small wind energy systems pursuant to Section 19.08.415.
- **Miscellaneous Uses:** Day-care home, large family, pursuant to Chapter 19.96 of this title, day-care home, small family, drainage sump, if proposed and approved as part of a tentative subdivision map or tentative parcel map, flood control facilities, garage, or yard sales pursuant to Subsection C of Section 19.16.130 of this chapter, home occupation pursuant to Chapter 19.94 of this title, water storage or groundwater recharge facilities, water system, small or large.

Land Uses Allowable Under a Conditional Use Permit

The following uses and all others determined to be similar to these uses pursuant to Sections 19.08.030 through 19.08.080 of this title are permitted in the E District subject to securing a conditional use permit in accordance with the standards and procedures set out in Chapter 19.104 of this title:

- **Agricultural Uses:** Growing and harvesting crops such as berry crops, bush crops, Christmas trees, field crops, irrigated, greenhouses for growing flowers and horticultural specialties, including hydroponically grown plants, for wholesale, mail order or off-site sales, nursery, plant, wholesale only, nut and fruit trees, timber, vegetables and herbs, and vine crops. Breeding and raising animals such as birds, including doves, and other small fowl in excess of twenty-five (25), Homing, racing, or show pigeons, in excess of forty (40) Ostriches or emus.
- **Residential Uses:** Additional single-family dwellings, subject to the density limit set by Section 19.16.060 of this chapter, and not to exceed the maximum density permitted by the applicable General or Specific Plan. Community care facility, manufactured home, or mobile home, pursuant to Section 19.16.130.E.6 of this chapter, rest home, retirement home, single-family dwelling, with a width of sixteen (16) feet or less, and supportive or transitional housing.
- **Recreation, entertainment, and tourist facilities:** Community recreational facilities, country club, equestrian establishment, golf course, golf driving range, park or playground, racetrack or test track, automobile, bicycle, horse, or motorcycle, Recreational vehicle park, Sports arena, indoor Sports arena, outdoor, excluding flea market or swap meet, Swimming pool public, tennis or swim club, trade fairs and exhibitions, temporary (fourteen- (14-) day maximum), excluding flea markets and swap meets.
- **Commercial Uses:** Offices for temporary on-site real estate sales/construction and Veterinary services.
- **Services:** Ambulances.
- **Transportation Facilities:** Airport private, airport public use, and heliport.
- **Utility and Communications Facilities:** Radio, television, microwave, or commercial communications transmitter, receiver, or translator, utility substation not specifically exempted by state law.
- **Resource Extraction and Energy Development Uses:** Mineral exploration and wind-driven electrical generators, commercial or domestic: mining and mineral extraction pursuant to Chapter 19.100 of this title and oil or gas exploration and production pursuant to Chapter 19.98 of this title, wind-driven electrical generators, commercial or domestic.
- **Waste Facilities:** Sewage treatment plant.
- **Institutional Uses:** Cemetery, mausoleum, columbarium, or mortuary, charitable or public service organization, church, club or lodge, community or senior citizens center, crematory in conjunction with a cemetery, mausoleum, columbarium, or mortuary, library and museum, public agency or public utility building and facilities, rehabilitation facilities, sanitarium, and water treatment plant.
- **Educational Institutions and Schools:**
 - General: preschool, elementary school, Junior high school, Senior high school, College, or university.
 - Specialized Instruction: Art, craft, music, dance classes.
- **Miscellaneous Uses:** Animal shelter, Community septic disposal system, Day-care center, with or without extended overnight services, Drainage sump, Kennel or dog training facilities, Railroad caboose and similar accessory structures, recreational vehicle, or boat storage, private, and accessory to a residential

development, rescue/sanctuary animal facility, skateboard ramps, noncommercial, whitewater rafting launch or landing site, wild animal keeping, including ostriches and llamas.

Prohibited Uses with the Study Area

All other uses not permitted by Sections 19.16.020 and 19.16.030 of this chapter or accessories thereto under Section 19.08.110 are prohibited in the E District (Kern County 2021).

5.6.1.6 Other Applicable Planning Documents

Aside from the general plan, specific plan, and zoning ordinances implemented by the jurisdiction, there are no other applicable planning documents that provide for land use or development guidance/restrictions that could affect GESC.

5.6.1.7 Recent Proposed Zone Changes and General Plan Amendments

There are no recent or proposed General Plan amendments or rezones within Kern County or the Community of Willow Springs that could affect the GESC. Kern County revised their zoning ordinances in April 2021. In 2017, Kern County initiated the process of updating their General Plan for 2040. The 2040 process will be made public through Kern County's public facing website administered by the Kern County Planning and Natural Resources Department.

5.6.1.8 Recent Discretionary Review by Public Agencies

Kern County has not publicly identified any discretionary reviews related to the 2008 General Plan, Specific Plan, or zoning ordinances that would affect the study area

5.6.1.9 Population and Growth Trends

Land use and growth trends identified for the study area are based on population estimates, projections, and current land use plans. The California Department of Finance (CDOF) estimates that Kern County's 2021 population is 920,651. In 2010, the county's population was 842,069 according to the American Community Survey. The CDOF estimates Kern County's population in 2030 will be 1,019,221 (CDOF 2021). Based on Kern County population data for years 2010 and 2020, population growth within the county was 0.84 percent. This equates to a net increase in residents of 70,906 residents for 10-year period from 2010-2020.

According to the United States Environmental Protection Agency's (USEPA) environmental justice screening tool, <https://www.epa.gov/ejscreen>, the 2018 population for the 10-mile area surrounding the GESC was 23,542. This equates to a population density of 114 people per square mile (USEPA 2021). The Willow Springs Specific Plan indicates that growth rates within the community are hard to predict with projections ranging from stagnant to as high as 4 to 6 percent annually. The Willow Springs Specific Plan lists the following as key elements affecting population growth within the area:

- Population and housing demand within Willow Springs is affected by the proximity of Edwards Air Force Base to Willow Springs and the ever-changing number of civilian jobs and military personnel on base,
- The desirability of living in Willow Springs is correlated to home prices and rental rates in Palmdale/Lancaster, and
- The cost of traveling the added distance from Willow Springs to employment centers is greatly dependent of energy prices (Kern County 2008a).

5.6.2 Environmental Analysis

5.6.2.1 Significance Criteria

Factors typically used to evaluate the significance of project-related impacts are set forth in Appendix G of the California Environmental Quality Act (CEQA). Appendix G is a screening tool, not a method for setting thresholds of significance. Appendix G is typically used in the Initial Study phase of the CEQA process, asking a series of questions. The purpose of these questions is to determine whether a project requires an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration. As the Governor's Office of Planning and Research stated, "Appendix G of the Guidelines lists a variety of potentially significant effects but does not provide a means of judging whether they are indeed significant in a given set of circumstances." The answers to the Appendix G questions are not determinative of whether an impact is significant or less than significant. Nevertheless, the questions presented in CEQA Appendix G are instructive:

- Will the project physically divide an established community?
- Will the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Will the project conflict with any applicable habitat conservation plan or natural community conservation plan?
- Will the project convert prime farmland, unique farmland, or farmland of statewide importance (farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use?
- Will the project involve other changes in the existing environment which, given their location and nature, could result in conversion of farmland to nonagricultural use?

5.6.2.2 Potential Effects on Land Use during GESC Construction and Operation

5.6.2.2.1 Divide an Established Community

Neither the GESC nor the potential transmission line routes will physically divide an established community. In addition to the vacant parcels where the GESC will be located, the applicant has identified a series of existing ROWs for siting a transmission line that will connect the GESC to SCE's Whirlwind Substation or to LADWP's proposed substation. While a few single-family residences and farms occur within the study area, the growing number of renewable energy projects characterize this portion of Willow Springs.

Kern County has zoned the land for the GESC as Estate. The Estate designation allows for several land uses that are compatible with the energy storage facility and interconnection transmission line. Furthermore, with the Estate designation allows for an expanded number land uses through the completion of a Conditional Use Permit. While the Estate designation allows for single family residences, it does not permit for dense residential development characteristic of subdivisions and urban communities.

Therefore, implementation of GESC by the applicant will not divide an established community, affect access to a city or project area, or introduce incompatible land uses to the study area. Additionally, due to existing zoning designations, GESC will not displace existing nonindustrial development or result in new development that will physically divide future neighborhoods.

5.6.2.2.2 Conflict with an Applicable Land Use Plan, Policy, or Regulation

GESC and its appurtenances will be consistent with the 2008 Kern County General Plan, 2008 Willow Springs Specific Plan, and Kern County's 2021 zoning ordinances. Table 5.6-4 details the project's conformity with local land use plans and policies.

Consistent with the Application for Certification (AFC) process, the CEC will review the applicant's development and design plans for consistency with applicable land use plans, policies, and regulations.

The GESC and interconnection transmission line are all located on land zoned as Estate. The allowable land uses under this zone do not specifically list energy storage facilities as an allowable action. However, allowable uses in this zone include utility and communication facilities as well as, resource extraction and energy development. Additionally, Chapter 19.104 of the zoning ordinance permits an expansion of uses under the categories of utility and communication facilities and resource extraction and energy development with the completion of a Conditional Use Permit (CUP).

In the absence of the CEC's jurisdiction, a CUP would require Kern County Planning Commission approval. The Warren-Alquist Act provides the CEC with jurisdictional authority over compliance with local rules and regulations. The CEC will work with representatives from Kern County on CUP requirements and conditions.

The installation of the GESC is consistent with the expansion of renewable energy development within the study area and is consistent with the areas zoning, general plan, and specific plan designations. As such, implementation of the GESC will not conflict with any applicable land use plan, policy, or regulation; therefore, environmental impacts related to land use are less than significant.

Table 5.6-4: Project conformity with Local Land Use Plans and Policies

Goal/Policy	Project Consistency
Kern County	
Land Use, Open Space, and Conservation Element	
Physical and Environmental Constraints	
<p>Goal 1: To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.</p> <p>Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained.</p> <p>Policy 11: Protect and maintain watershed integrity within Kern County.</p>	<p>GESC is consistent with Goal 1 and Policies 1 and 11. The project is compatible with adjacent land uses. Refer to Section 5.10, socioeconomics, for additional information on the economic benefits of implementing GESC.</p>
Public Facilities and Services	
<p>Goal 1: Kern County residents and businesses should receive adequate and cost-effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.</p> <p>Goal 5: Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.</p> <p>Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.</p> <p>Policy 3: Individual projects will provide availability of public utility service as per approved guidelines of the serving utility.</p>	<p>GESC is consistent with Goals 1 and 5. GESC includes construction of a new energy storage facility which will contribute to future sustainable development within the county.</p>
Resource	
<p>Goal 1: To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.</p> <p>Goal 3: To ensure that the development of resource areas minimizes effects of neighboring resource lands.</p> <p>Goal 6: Encourage alternative sources of energy, such as solar and wind energy, while protecting the environment.</p> <p>Policy 1: Appropriate resource uses of all types will be encouraged as desirable and consistent interim uses in undeveloped portions of the County regardless of General Plan designation.</p>	<p>GESC is consistent with Goals 1, 3, and 6. GESC includes construction of a new energy storage facility which will contribute to future sustainable development within Kern County.</p>

Goal/Policy	Project Consistency
General Provisions	
<p>Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.</p> <p>Policy 8: The County shall ensure that new industrial uses and activities are sited to avoid or minimize significant hazards to human health and safety in a manner that avoids over concentrating such uses in proximity to schools and residents</p>	<p>GESC is consistent with Goal 1, Policy 8. GESC includes construction of a new energy storage facility which will contribute to future sustainable development within Kern County.</p>
Public Services and Facilities	
<p>Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.</p> <p>Policy 16: The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to serve the project.</p>	<p>GESC is consistent with Policies 9 and 16. The applicant, will be solely responsible for the construction and operation of the GESC in Kern County, CA.</p>
Air Quality	
<p>Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments.</p> <p>Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District on ministerial permits.</p>	<p>GESC is consistent with Policies 18 and 20. The proposed actions is an energy storage facility. The facility does not require fossil fuels for its operation.</p>
Archaeological, Paleontological, Cultural, and Historical Preservation	
<p>Policy 25: The County will promote the preservation of cultural and historic resources which provide ties with the past and constitute a heritage value to residents and visitors.</p>	<p>GESC is consistent with Policy 25. Refer to Section 5.3 Cultural Resources and Section 5.8 Paleontological Resources, for additional information on Archaeological, Paleontological, Cultural, and Historic Preservation.</p>
Threatened and Endangered Species	
<p>Policy 27: Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.</p> <p>Policy 28: County should work closely with State and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.</p>	<p>GESC is consistent with Policies 27, 28, and 29. Refer to Section 5.2, Biological Resources, for additional information on threatened and endangered species.</p>

Goal/Policy	Project Consistency
Policy 29: The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.	
Surface Water and Groundwater	
<p>Policy 34: Ensure that water quality standards are met for existing users and future development.</p> <p>Policy 41: Review development proposals to ensure adequate water is available to accommodate projected growth.</p> <p>Policy 43: Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.</p>	GESC is consistent with Policies 34, 41, and 43. Refer to Section 5.15, Water Resources, for additional information on surface water and groundwater.
Circulation Element	
Highway	
Goal 5: Maintain a minimum Level of Service (LOS) D.	GESC is consistent with Goal 5. Refer to Section 5.12, Traffic and Transportation, for additional information on the project effects on LOS.
Trucks and Highways (Part 1)	
<p>Goal 1: Provide for Kern County's heavy truck transportation in the safest way possible.</p> <p>Goal 2: Reduce potential overweight trucks.</p> <p>Goal 3: Use State Highway System improvements to prevent truck traffic in neighborhoods.</p> <p>Policy 1: Caltrans should be made aware of the heavy truck activity on Kern County's roads.</p>	GESC is consistent with Goal 1, 2, and 3 and Policy 1. Refer to Section 5.12, Traffic and Transportation, for additional information on trucks and truck routes.
Trucks and Highways (Part 2)	
<p>Goal 1: Reduce risk to public health from transportation of hazardous materials.</p> <p>Policy 1: The commercial transportation of hazardous material, identification and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.</p>	GESC is consistent with Goal 1 and Policy 1. Refer to Section 5.14, Waste Management, for additional information on transportation and storage of hazardous materials.
Noise Element	
Sensitive Noise Areas	
Goal 1: Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.	GESC is consistent with Goal 1 and Policies 1, 4, and 7. Refer to Section 5.7, Noise, for additional information on

Goal/Policy	Project Consistency
<p>Policy 1: Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.</p> <p>Policy 4: Utilize good land use planning principles to reduce conflicts related to noise emissions.</p> <p>Policy 7: Employ the best available methods of noise control.</p>	<p>facility operations, construction schedules, and mitigation measures.</p>
Safety Element	
Introduction	
<p>Goal 1: Minimize injuries and loss of life and reduce property damage.</p> <p>Policy 1: The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety</p>	<p>GESC is consistent with Goal 1 and Policy 1. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with the county's safety requirements.</p>
Landslides, Subsidence, Seiche, and Liquefaction	
<p>Policy 1: Determine the liquefaction potential at sites in areas of shallow groundwater (Map Code 2.3) prior to discretionary development and determine specific mitigation to be incorporated into the foundation design, as necessary, to prevent or reduce damage from liquefaction in an earthquake.</p> <p>Policy 3: Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.</p>	<p>GESC is consistent with Policies 1 and 3. Refer to Section 5.4, Geological Hazards, for additional information on potential hazards and mitigation measures. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with the county's safety requirements.</p>
Wildland and Urban Fire	
<p>Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.</p> <p>Policy 3: The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.</p> <p>Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.</p> <p>Policy 6: All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.</p>	<p>GESC is consistent with Policies 1, 3, 4, and 6. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with the county's safety requirements.</p>
Hazardous Materials	
<p>Policy 1: The proposed siting or expansion of hazardous waste facilities will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.</p>	<p>GESC is consistent with Policy 1. Refer to Section 5.14, Waste Management, for additional information on transportation and storage of hazardous materials.</p>

Goal/Policy	Project Consistency
Importance of Energy to Kern County	
<p>Policy 8: The County should work closely with local, state, and federal agencies to assure that energy projects (both discretionary and ministerial) avoid or minimize direct impacts to fish, wildlife, and botanical resources, wherever practical.</p> <p>Policy 10: The County should require acoustical analysis for energy project proposals that might impact sensitive and highly sensitive uses in accordance with the Noise Element of the General Plan.</p>	<p>GESC is consistent with Policies 8 and 10. GESC includes construction of a new energy storage facility which will contribute to future sustainable development within Kern County.</p>
Kern County's Economic Dependence on the Oil Marketplace	
<p>Goal 1: To reduce the County's susceptibility to fluctuations in the petroleum production levels, and to encourage diversification of the economy.</p> <p>Policy 4. The County should encourage the development of renewable energy industries to diversify the energy economy in Kern County.</p>	<p>GESC is consistent with Goal 1 and Policy 4. GESC includes construction of a new energy storage facility which will contribute to future sustainable development within Kern County.</p>
Transmission Lines	
<p>Goal 1: 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.</p> <p>Policy 5: The County should discourage the siting of above-ground transmission lines in visually sensitive areas.</p>	<p>GESC is consistent with Goal 1 and Policy 5. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with best practices.</p>
Willow Springs	
Land Use Elements	
Land Use	
<p>Goal 1: To ensure compatible uses of land consistent with both short- and long-term planning objectives of the County.</p> <p>Goal 2: To promote a balanced and functional mix of land uses consistent with the goals and policies of the Kern County General Plan.</p> <p>Goal 9: To achieve consistency between zoning and the policies and objectives of the Specific Plan.</p>	<p>GESC is consistent with Goal 1, 2 and 9. The project is compatible with adjacent land uses. Refer to Section 5.10, Socioeconomics, for additional information on the economic benefits of implementing GESC.</p>
Resource	
<p>Goal 3: Encourage retention of productive agricultural and dormant mineral resources by imposing a restriction on allowing urban type land uses on nearby adjacent lands.</p>	<p>GESC is consistent with Goal 3. GESC includes construction of a new energy storage facility which will contribute to future</p>

Goal/Policy	Project Consistency
<p>Policy 1: Provide a method encouraging the preservation of agricultural land.</p> <p>Policy 2: Initial development within the Update area shall, when possible, be directed towards previously impacted areas (i.e., agricultural fields).</p> <p>Policy 3: To ensure compliance with applicable State and federal laws and to protect the biological resources present in the Specific Plan area.</p>	<p>sustainable development within Kern County. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with best practices.</p>
Air Quality	
<p>Goal 1: Imposition of appropriate mitigation measures to reduce where practical to do so, the effect short-term and long-term projects have on the area which involve grading activities, erosion controls, revegetation of disturbed sites, and provisions to introduce into the plan area a competitive job market to reduce travel times.</p>	<p>GESC is consistent with Goal 1 and Policy 1. For additional information of air quality, refer to Section 5.1. The proposed action is an energy storage facility. The facility does not require fossil fuels for its operation. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with best practices.</p>
<p>Policy 1: Compliance with the Mitigation/Implementation Measures and enactment of an approved Air Quality Attainment Plan.</p>	
Biological Resources	
<p>Policy 1: Where possible, development shall be designated to avoid displacement of sensitive species.</p> <p>Policy 2: Focused surveys shall be conducted by a County-approved biologist to establish the presence or absence of sensitive species.</p> <p>Policy 3: Initial development within the area covered under the Willow Springs Specific Plan, when possible, will be directed towards previously impacted areas.</p>	<p>GESC is consistent with Policies 1, 2, and 3. Refer to Section 5.2, Biological Resources, for additional information on threatened and endangered species.</p>
Cultural Resources	
<p>Goal 1: To preserve cultural resources contained on sensitive sites located within the Willow Springs Specific Plan area.</p> <p>Policy 1: Archaeological investigations shall be required of specific properties proposed for development.</p> <p>Policy 2: Recorded archaeological sites shall be subjected to individual studies prior to development.</p> <p>Policy 15: Require cultural resources report for those areas with high probability for prehistoric activity prior to issuance of any grading permits.</p>	<p>GESC is consistent with Goal 1 and Policies 1, 2, and 15. Refer to Section 5.3 Cultural Resources and Section 5.8 Paleontological Resources, for additional information on cultural resources</p>
Seismic Safety and Safety	
<p>Goal 7: Minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone, and sewer lines, streets, and bridges located in areas of special flood hazard.</p>	<p>GESC is consistent with Goal 7 and Policy 1. Refer to Section 5.4, Geological Hazards, for additional information</p>

Goal/Policy	Project Consistency
<p>Policy 1: New development within the 100-year floodplain shall be regulated in accordance with the Floodplain Management Section of the Department of Planning and Development Services according to the Flood Damage Prevention Ordinance, the Kern Land Division Ordinance, and the Kern County Zoning Ordinance as may be amended from time to time.</p>	<p>on potential hazards and mitigation measures. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with the county's safety requirements.</p>
Public Facilities	
<p>Goal 3: To restrict, if possible, any further and/or unnecessary drawdown of the water table within the plan area.</p> <p>Policy 2: In evaluating a development application, Kern County will consider both its physical and fiscal impact on the local school district and other public facilities. If it is found that the district or facilities involved will, as a result, require additional facilities or incur costs requiring additional local revenues, the development project will be required as a condition of approval to contribute funds to the district for the costs directly attributable to the project.</p> <p>Policy 4: New development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.</p>	<p>GESC is consistent with Goal 3 and Policies 2 and 4. GESC includes construction of a new energy storage facility which will contribute to future sustainable development within the county.</p>
Industrial	
<p>Goal 1: To encourage well-planned industrial development to ensure compatibility with adjacent land uses.</p> <p>Goal 2: To accommodate a wide variety of industrial uses while ensuring compatibility with the area and adjacent land uses.</p> <p>Goal 3: To make the best use of existing transportation routes and facilities, natural barriers, and wind patterns as a basis for siting industry.</p>	<p>GESC is consistent with Goals 1, 2, and 3 and Policies 2 and 8. GESC includes construction of a new energy storage facility which will contribute to future sustainable development within the county.</p>
Noise	
<p>Goal 2: To minimize disruption to the quality of life resulting from excessive noise.</p> <p>Goal 3: To maintain reasonable noise level standards, consistent with the Kern County Noise Element.</p> <p>Policy 1: Noise emissions from new development will be controlled and off-site levels limited to the standards of the Kern County General Plan Noise Element</p>	<p>GESC is consistent with Goals 2 and 3 and Policies 1 and 3. Refer to Section 5.7, Noise, for additional information on facility operations, construction schedules, and mitigation measures.</p>
Circulation	
<p>Goal 5: To maintain public safety within the plan area by providing a more direct and efficient circulation system for law enforcement and fire protection vehicles.</p>	

Goal/Policy	Project Consistency
Goal 7: To provide an adequate circulation system which will support the proposed land uses.	GESC is consistent with Goals 5 and 7. Refer to Section 5.12, Traffic and Transportation, for additional information on trucks and truck routes.
Water Quality and Availability	
<p>Goal 1: To ensure that new developments are provided with an adequate water supply and wastewater disposal/treatment facilities.</p> <p>Policy 1: Water supply method and wastewater disposal/treatment facility shall be as required by Kern County.</p> <p>Policy 2: Separate environmental documentation shall be required for the methods of water supply and wastewater disposal/treatment selected.</p>	GESC is consistent with Goal 1 and Policies 1 and 2. Refer to Section 5.15, Water Resources, for additional information on surface water and groundwater.
General Provision	
Goal 9: Fire flow provisions and on-site fire protection standards (i.e., sprinklers/water storage) shall follow minimum standards provided by the Kern County Fire Department.	The project is consistent with Goal 9. The project will submit design plans to the CEC for review and approval prior to the commencement of construction, which will ensure design review consistent with the county's safety requirements.

Source: Kern County General Plan 2008b; Willow Springs Specific Plan 2008a.

5.6.2.2.3 Conflict with an Applicable Habitat Conservation Plan

The GESC is not located within the limits of any adopted Habitat Conservation Plan or Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; thus, there will be no impact.

5.6.2.2.4 Convert Farmland to Non-agricultural Uses

The two parcels that will comprise the GESC are not being used for agricultural purposes. Additionally, the CDOC maps the two parcels and potential transmission line route lands as Non-agricultural and Natural Vegetation. The Non-agricultural and Natural Vegetation designation does not conform to CDOC's definition of farmland. As noted, the zoned designation for the study area is Estate. The Estate designation includes various land uses including those associated with the GESC. Therefore, GESC and its appurtenances will not result in conversion of designated agricultural lands to other land use.

5.6.2.2.5 Cause Changes that will Result in the Conversion of Farmland

As previously noted, Willow Springs is zoned Estate. The Estate designation includes various land uses including those related to utility and communication facilities as well as, resource extraction and energy development. Kern County has zoned Willow Springs to avoid large residential and commercial development. Future development within Kern County and Willow Springs will comply with local comprehensive land use planning documents and ordinances. As such, the GESC will not cause land use changes that will induce other land use changes resulting in the long-term conversion of farmland.

5.6.2.3 Compatibility with Existing and Designated Land Uses and Applicable Planning Policies

Table 5.6-4 lists applicable local plans and policies and describes the project's conformity with them.

5.6.3 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (Public Resources Code [PRC] Section 21083; CCR, Title 14, Section 15064[h], 15065[c], 15130, and 15355). The CEQA Guidelines further note that:

The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative effects can result from individually minor, but collectively significant, projects taking place over a period of time (CCR Section 15355).

Cumulative land use impacts could occur if the development of the GESC and other related past, present, and reasonably foreseeable probable future projects will be inconsistent with applicable plans and policies or have other cumulative land use-related impacts such as the conversion of farmland.

The project is consistent with land use plans and policies and is compatible with adjacent uses. Therefore, the project will not contribute to cumulative impacts associated with land use compatibility. Moreover, there are no past, present, or reasonably foreseeable future projects proposed within the study area that would result in adjacent incompatible land uses (see Appendix 5.6A for a list of cumulative projects).

Long-term cumulative impacts are not anticipated with the implementation of GESC and the listed projects because each project is required to comply with CEQA guideline requirements for evaluating potential cumulative

impacts, and/or obtain approval from the Lead Agency prior to permitting and construction by demonstrating conformance to existing land use policies. For these reasons, GESC will not cause a significant cumulative land use impact.

5.6.4 Mitigation Measures

Because the GESC will cause no significant adverse impacts to land use and land use plans, no mitigation measures beyond those incorporated into the project's design are necessary.

5.6.5 Laws, Ordinances, Regulations, and Standards

This section lists and discusses the land use LORS that apply to GESC. Consistent with AFC requirements, all plans, and policies applicable to the 1-mile area surrounding the GESC and 0.25-mile area surrounding the offsite interconnection transmission line are summarized below. As discussed above, GESC, including all its project components, is entirely located within the Kern County, CA community of Willow Springs.

5.6.5.1 Federal LORS

Because GESC is located on private lands within the State of California and in the County of Kern, there are no federal laws and regulations that apply to the construction and operation of the project.

5.6.5.2 State LORS

5.6.5.2.1 Warren Alquist Act

The AFC process is a certified regulatory process pursuant to the Warren-Alquist Act and, therefore, fulfills the requirements of CEQA. CEQA is codified in the California PRC, Section 21000-21178.1. Guidelines for implementation of CEQA are codified in the CCR, Sections 15000-15387.

5.6.5.2.2 California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly known as the Williamson Act, was enacted to encourage preservation of agricultural lands and encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to create an agricultural preserve and agree to keep their land in agricultural production (or another compatible use) for at least 10 years. Maps, statistics, and reports on Williamson Act lands are available online. Neither the GESC nor potential transmission line route alternatives are designated as preserved agricultural lands under the Williamson Act.

5.6.5.3 Local LORS

Each California government's General and Specific Plan (California State Planning Law, Government code Section 65302 et seq.) include land use provisions that reflect the goals and policies that guide the physical development of land in their jurisdiction. Kern County Planning and Natural Resource Department is responsible for enforcing the county zoning ordinances for Willow Springs. Table 5.6-5 lists the applicable LORS, the agencies that administer them, and the AFC section that discusses the project's conformance with the LORS.

Table 5.6-5: LORS for Land Use

LORS	Requirement/Applicability	Administering Agency	AFC Section Explaining Consistency
State			
CEQA PRC Code, Sections 21000-21178.1, including Guidelines for implementation of CEQA are codified in the CCR Sections 15000-15387	Establishes policies and procedures for review of proposed power plants in California.	CEC	Section 5.6.5.2
Warren-Alquist Act PRC Section 25000 et seq.)	Legislation that created and gives statutory authority to the CEC.	CEC	Section 5.6.5.2
California Lands Conservation Act (Williamson Act)	Preserves agricultural land and encourages open space preservation and efficient urban growth.	CDOC	Section 5.6.5.2
CEQA PRC Code, Sections 21000-21178.1, including Guidelines for implementation of CEQA are codified in the CCR Sections 15000-15387	Establishes policies and procedures for review of proposed power plants in California.	CEC	Section 5.6.5.2
Local			
County of Kern General Plan	Comprehensive long-range plan to serve as the guide for the physical development of the County.	Kern County Planning and Natural Resources Department	Section 5.6.2.2, Section 5.6.2.3, and Table 5.6-4
County of Kern Willow Springs Specific Plan	Comprehensive long-range plan to serve as the guide for the physical development of Willow Springs.	Kern County Planning and Natural Resources Department	Section 5.6.2.3, and Table 5.6-4
County of Kern Zoning Ordinance	Establishes zoning districts governing land use and the placement of buildings and district improvements.	Kern County Planning and Natural Resources Department	Section 5.6.2.3 and Section 5.6.2.3

5.6.6 Agencies and Agency Contacts

Agencies and contacts are provided in Table 5.6-6.

Table 5.6-6: Agency Contacts for Land Use

Issue	Agency	Contact
Zoning and Land Use Data	Kern County Planning and Natural Resources Department	Lorelei H. Oviatt AICP, Director Phone: (661) 862-8600 Public Services Building 2700 "M" Street., Suite 100 Bakersfield, CA 93301-2370

5.6.7 Permits and Permit Schedule

The project Applicant and the CEC will work with the Kern County Planning Commission on review of the AFC to ensure compliance with Kern County land use designations and requirements. Because of the exclusive jurisdiction of the CEC, no other land use permits are required for the GESG.

5.6.8 References

- Bureau of Land Management. 2005. West Mojave Plan. https://permanent.fdlp.gov/lps125985/Vol-1-Chapter1_Bookmarks.pdf. Website accessed July 20, 2021.
- Kern County. 2021. Zoning ordinance. <https://psbweb.co.kern.ca.us/planning/pdfs/KCZOApr2021.pdf>. Website accessed July 20, 2021.
- Kern County. 2008a. Willow Springs Specific Plan. https://psbweb.co.kern.ca.us/planning/pdfs/SPs/WillowSprings_SP.pdf. Website accessed July 20, 2021.
- Kern County. 2008b. Kern County General Plan. https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Website accessed July 20, 2021.
- Kern County GIS. 2021. <https://maps.kerncounty.com/H5/index.html?viewer=KCPublic>. Website accessed July 30, 2021.
- California Department of Conservation. 2018. California Important Farmland Finder. <https://maps.conservation.ca.gov/DLRP/CIFF/>. Website accessed July 30, 2021.
- California Department of Conservation. 2019. FMMP - Rural Land Mapping Project. https://www.conservation.ca.gov/dlrp/fmmp/Pages/rural_land_mapping.aspx. Website accessed July 30, 2021.
- California Department of Conservation. 2021. Important Farmland Mapping Categories and Soil Taxonomy Terms. https://www.conservation.ca.gov/dlrp/fmmp/Documents/soil_criteria.pdf. Website accessed July 30, 2021.
- California Department of Finance. Demographics. <https://www.dof.ca.gov/Forecasting/Demographics/>. Website accessed July 20, 2021.
- California Department of Transportation. 2021. Scenic Highways: California State Scenic Highways <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Website accessed July 20, 2021.
- United States Environmental Protection Agency. 2021. EJSCREEN Mapper. <https://ejscreen.epa.gov/mapper/>. Website accessed July 20, 2021.