3.2. AGRICULTURAL RESOURCES

3.2.1. Environmental Setting

Westlands Solar Park

State and Regional Context

According to the Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP), in 2014, the State of California contained 31.4 million acres of agricultural land, of which 5.1 million acres were Prime Farmland (DOC 2015d). The total value of agricultural products sold in California in 2012 was \$42.6 billion, which ranked highest in the nation and represented 10.7 percent of the U.S. total (USDA 2014).

In 2014, Kings County had a total 821,397 acres of farmland, representing about 3 percent of the State total. Kings County's farmland includes approximately 112,225 acres of Prime Farmland, which comprise 13.5 percent of the County's total farmland, and approximately 2.5 percent of the State's Prime Farmland (DOC 2015e).

The value of agricultural products in Kings County in 2014 was \$2.47 billion, which ranked 8th in California, and represented about 6 percent of the State total (Kings County 2015).

Historical Context

The WSP plan area lies within the service area of the Westlands Water District (WWD), which was formed in 1952 to serve agricultural water users on the west side of the San Joaquin Valley. The District is generally bounded on the east by the San Joaquin River, Fresno Slough, and the Kings River, on the west by the foot of the Diablo Range along I-5, and extends from Mendota in the north to Kettleman City in the south (see Figure PD-1 in Chapter 2).

In 1960, the U.S. Congress authorized construction of the San Luis Unit (SLU) of the Central Valley Project (CVP), and in 1968 deliveries of CVP water began upon completion of the San Luis Canal by the U.S. Bureau of Reclamation (USBR). The WWD service area includes 610,000 acres which comprise approximately 87 percent of the San Luis Unit service area. Under its current contract with the USBR, the Westlands Water District is entitled to receive 1.197 million acre-feet of surface water delivery during years when 100 percent of this "Contract" water is available.

As described in detail below, the soils in the eastern portions of Westlands, including the entire WSP plan area, contain relatively high levels of naturally-occurring salts and trace elements such as selenium and boron. In addition, the presence of clay layers near the ground surface, along with the high clay content of the soils, results in "perched groundwater" conditions and seasonal soil saturation near the root zone of crops. The high groundwater conditions and potential for cumulative soil salinization were recognized in the original Congressional authorization for the San Luis Unit, which mandated the construction of the San Luis Drain for the exclusive purpose of transporting subsurface drainage from the southern end of the San Joaquin River drainage basin to Suisun Bay. An approximately 82-mile segment of the drainage canal, originating near Five Points and extending northwest to the Kesterson Reservoir near Los Banos, was completed by 1975 when construction was stopped due to lack of government funding. Originally intended as regulating reservoir for drainage flows to the Delta, Kesterson became a *de facto* drainage sump where ongoing evaporation of incoming drainage flows resulted in increasingly toxic concentrations of selenium which in turn caused severe impacts to waterfowl nesting at the reservoir, including mortality, reproductive failure, and birth deformities. Kesterson was closed to agricultural drainage water in 1986 and Westlands has been without drainage service since that time (USBR 2006).

In 2000, a federal Court Order confirmed that USBR is responsible for providing drainage service to lands within the San Luis Unit. Subsequently, the USBR commenced work on the San Luis Drain Facility Re-Evaluation EIS (SLDFR EIS), the purpose of which was to identify and evaluate alternative means of managing the regional shallow groundwater table within the 298,000-acre "drainage-impaired" area within Westlands by providing drainage service and/or reducing contributions of water to the shallow water table through land retirement. The drainage service would involve the construction of complex and costly systems for conveyance, treatment, and reuse of treated drainage water.

At the conclusion of the project review and EIS process, the USBR selected the alternative that would involve the retirement of 194,000 acres from irrigation. The remaining lands within the drainage-impaired area would stay in production and would be provided with drainage service in order to maintain the water and salt balance for sustainable agriculture within those areas (USBR 2006).

A project feasibility report prepared after approval of the EIS Record of Decision (ROD) estimated that the total construction cost for installation of the drainage and treatment facilities in the In-Valley/Water Needs Land Retirement Alternative would be \$2.7 billion in 2006 dollars (USBR 2007).

On September 15, 2015, the U.S. Department of Justice and Westlands Water District approved a settlement agreement regarding the drainage issue. Under the terms of the settlement, the District is to assume responsibility for managing drainage within Westlands, and CVP surface water deliveries to Westlands will be capped at 895,000 acre-feet per year, and the District will permanently retire a minimum of 100,000 acres from irrigated agriculture, among other things. The retired lands are to be used for renewable energy projects, upland habitat restoration, and other uses (USBR 2015).

WSP Site Conditions

Agricultural Setting

The 20,938-acre WSP plan area consists almost entirely of agricultural fields and supporting features such as irrigation canals and piping, drainage ditches, farm lanes, agricultural wells, and electric power lines. The exception is the northeast corner of the plan area, at the southwest corner of Avenal Cutoff Road and 25th Avenue, where the 2 MW Westside Solar Project was recently constructed on 18 acres, and is currently operational.

A variety of field crops are grown within the WSP plan area, including cotton, tomatoes, wheat, corn, and alfalfa. The more fertile lands in the extreme western portion of the WSP plan area, near Avenal Cutoff Road and Nevada Avenue, support fruit and nut crops such as grapes, pistachios, and almonds. In the eastern portion of the plan area, where approximately 4,960 acres have been retired from irrigated

agriculture, the land is dry farmed for winter wheat with rotation to fallowing during the summer months.

Geomorphology and Soils

The parent materials of the WSP soils originate from marine sediments of the Coast Ranges formed millions of years ago when these lands were on the seabed. These formations, which primarily consist of fine-grained shales, were uplifted over time, and were then subject to erosional forces which transported these sediments downstream to the west side of the valley where they formed large alluvial fans. The sedimentary formations of the Coast Ranges retained high concentrations of salts resulting from evaporative processes over millions of years. Since these salts are soluble, they were dissolved by rainfall and mobilized in drainage courses that carried the salts downstream to be deposited with the formation of the alluvial fans (Presser 1987, p. 807). These salts include associated trace elements such as selenium (Se), a semi-metallic element which is essential to human health in very small amounts but hazardous to health in concentrations that exceed 30 parts per billion (ppb) (OEHHA 2010).

The geomorphologic processes resulted in the formation of two distinct landform types in the western San Joaquin Valley, including: 1) the upper and middle alluvial fans and fan terrace areas in the higher westerly elevations; and 2) the lower alluvial fans or fan skirts, interfan areas, and basin floors located in the lower lying eastern areas. The WSP is located on the lower alluvial fan area which is underlain by clay layers at depths of 10 to 40 feet that impede the downward movement of water (Presser 1987, p. 807). These lands are also characterized by fine-textured clayey soils with low permeability and slow groundwater movement. The upper clay layers combined with the slow draining soils result in a high or "perched" groundwater table that is commonly within 10 feet of the ground surface throughout most of the WSP plan area, and within 5 feet over substantial areas, especially in normal or wet rainfall years.

In the higher alluvial fan areas to the west of WSP, the soils consist of coarse-textured sediments that are well drained and have low salt concentrations. These lands have naturally high fertility and are not subject to the shallow groundwater conditions that prevail in the lower alluvial fan deposits to the east (WWD 2015b). The water table in this western area is typically located several hundred feet below the ground surface (USBR 2006, p. 6-11).

NRCS Soil Survey

The most recent comprehensive soil survey of Kings County was completed in 1985 by the National Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS). According to the Kings County Soil Survey, the WSP site includes 10 different soil types, as shown in Figure AG-1. These soils are listed in Table AG-1 along with their NRSC land capability classification, Story Index ratings, and Important Farmland Designations under the Department of Conservation Farmland Monitoring and Mapping Program (FMMP), along with brief notes on soil limitations as noted by NRCS. These soils are saline-alkali and therefore are best suited to salt- and alkali-tolerant, drought resistant crops. These soils also are limited by very slow permeability, and have a high shrink-swell potential, and are highly corrosive to concrete and steel.

TABLE AG-1

AGRICULTURAL CAPABILITY OF WSP SOILS

	NRCS	Acres in	NRCS Land Capability		Storie	Important		
Soil Unit	Map Unit Symbol	WSP (Approx.)	Irrigated	Non- Irrigated	Index Rating ¹	Farmlands Designation	NRCS Soil Limitations	
Calfax clay loam, saline- sodic	480fw	820	IIs-6	VIIs	58	Farmland of Statewide Importance	S = soil limitations within the rooting zone such as salinity. Saline = soil contains soluble salts which impair productivity for plants. Sodic/Alkali = soil contains sufficient sodium to interfere with the growth of most crop plants. Groundwater – Perched.	
Houser clay	126	640	IIIw-6	VIIw	14	Farmland of Statewide Importance/ Grazing Land ²	W = excess water such as high water table	
Lethent clay loam	139	13,888	IIIs-6	VIIs	41	F. of Statewide Importance/ Grazing Land	S = soil limitations within the rooting zone such as salinity. Groundwater – Perched.	
Panoche Ioam	150	320	Ι	VIIc	100	Prime Farmland	C = climatic limitation where climate (temperature or lack of soil moisture) is the only major hazard or limitation.	
Panoche clay loam	151	1,070	lls-6	VIIs	60	Grazing Land ²	S = soil limitations within the rooting zone such as salinity.	
Pitco clay	153	280	IIIw-6	VIIw	19	Grazing Land ²	W = excess water such as high water table. Groundwater – perched.	
Twisselman silty clay, saline-alkali	166	1,120	IIIs-6	VIIs	20	Farmland of Statewide Importance/ Grazing Land ²	S = soil limitations within the rooting zone such as salinity. Saline = soil contains soluble salts which impair productivity for plants. Sodic/Alkali = sodium content interferes with the growth of most crop plants.	
Westcamp loam	175	360	IIIw-6	VIIw	49	F. of Statewide Importance/ Grazing Land ²	W = excess water such as high water table. Groundwater – Perched.	
Westhaven loam	176	760	Ι	VIIc	95	Prime Farmland	C = climatic limitation where climate (temperature or lack of soil moisture) is the only major hazard or limitation.	
Westhaven clay loam, saline-alkali	178	1,680	IIIs-4	VIIs	65	Farmland of Statewide Importance	S = soil limitations within the rooting zone such as salinity. Saline = soil contains soluble salts which impair productivity for plants. Sodic/Alkali = soil contains sufficient sodium to interfere with the growth of most crop plants.	
i otal Acres		20,938			1	1		

¹ Storie Index rating does not consider availability of water supply for irrigation.

² Mapped by FMMP as Grazing Land where land has not been irrigated for at least 4 years (see Figure AG-2). Sources: NRCS 1986; CDOC 2017.



Sources: NRCS; UC Davis SoilWeb, 2016

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Most of the other soil types of the WSP plan area are also subject to limitations such as high salinity, poor drainage, or both (NRCS 1986).

NRCS Land Capability Classification

Under the soils classification system of the NRCS, soils are classified according to eight broad 'Land Capability' classes, with Class I and II soils being the most fertile and well suited for cultivation. As shown in Table AG-1, several soil types are classified as Class I or II soils with irrigation, including Calfax clay loam, Panoche loam and clay loam, and Westhaven loam. The Class I and II soil types under irrigation cover approximately 3,210 acres, or 15 percent of the WSP plan area. The remaining 85 percent of the project soils are classified as Class III soils with irrigation, which the NRCS describes as having "severe limitations that reduce the choice of plants or require special conservation practices, or both." Without irrigation, all project soils are classified as Class VII soils which are described by the NRCS as having "very severe limitations that make them generally unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife." As mentioned, the predominant soil type within the WSP plan area is Lethent clay loam which occupies approximately 66 percent of the plan area. This soil type is classified as Class III (non-prime) with irrigation and Class VII without irrigation (NRCS 1986).

Storie Index Ratings

The second land capability system applied by NRCS, called the Storie Index, is specific to California. Soils with a Storie Index rating of 80 or greater are classified as Grade 1 or prime soils. Two soil types in the plan area have Storie Index ratings higher than 80, including Panoche loam which has a Storie Index rating of 100, and Westhaven loam has a rating of 95 with irrigation. Together these soil types cover 1,080 acres, or 5 percent of the plan area (NRCS 1986).

Groundwater Conditions

Mapping by the California Department of Water Resources (DWR) and WWD shows that shallow groundwater levels over the majority of the WSP plan area are typically between 5 and 10 feet below the ground surface, and that significant areas have groundwater less than 5 feet below the surface. The semi-annual groundwater mapping prepared by WWD shows some seasonal variation in near-surface groundwater levels, and also some fluctuation in response to drought conditions; however, the overall variation in the near-surface groundwater table elevation within the WSP site over the past 10 years has been 5 feet or less (DWR 2010a)(WWD 2006, 2015b).

The high clay content results in low permeability, and soil amendments such as gypsum are required to aid downward percolation of irrigation water. Intensive management is required to reduce the salinity and maintain soil productivity (NRCS 1986, p. 44). The WSP growers confirm that the naturally high salt content of the soil requires close management, and that the natural low fertility soils require substantial amendment with nitrogen and phosphorus to produce acceptable yields (Shannon 2011)(Esajian 2011).

Under irrigated agriculture, substantial amounts of soluble salts and selenium in the native soils are dissolved and are leached into the groundwater. As discussed, subsurface drainage is restricted due to the presence of the near-surface clay layers as well as the high clay content of the near-surface soils. With the application of irrigation water, the impedance of downward drainage by the slow draining soils and the near-surface clay layers result in rising groundwater levels. The salts and selenium in the near-

surface groundwater are transported upward toward the surface through capillary action, or wicking. When the near-surface water evaporates, the precipitated salts are left behind, resulting in increased salinity in the surface soils (USBR 2006, p. 13-2).

Elevated salt concentration in soil and groundwater tends to inhibit plant growth and reduce yields. Since plants are able to absorb only pure water, the higher the salt concentration, the less water is available to plants, even though the soil may appear wet. This is known as "physiological drought" and has the same effect as an actual drought in terms of starving plants of water needed for growth. There is wide variation in the ability of plants to tolerate saline water, with each plant or crop having different thresholds of salinity tolerance where crop yields begin to diminish rapidly (CSU 2011).

On the west side of the San Joaquin Valley, this problem arose as early as the late 1890s with the application of well water to field crops, and resulted in lands going out of production within a short period of years. The completion of the San Luis Unit of the USBR's Central Valley Project in the 1960s provided imported surface water for irrigation. While this vastly expanded the area that could be placed under irrigated agriculture on the valley's west side, it also added large quantities of water to the already shallow water table in the eastern areas of the San Luis Unit, including the WSP plan area. In addition, the imported surface water includes some salts, which further exacerbates the soil salinity imbalance. In addition, irrigation water pumped from wells screened in the lower aquifer contains increasing concentrations of salts that have leached down from the surface into the lower aguifer over the years. The rising concentration of salts and the rising water table can have the dual effect of water logging the root zone of planted crops and exceeding their salt tolerance. With advances in agronomic practices over the years, growers in the drainage-impaired areas have been able to apply advanced management techniques to increase irrigation efficiency and provide for calibrated leaching some salts from the nearsurface groundwater. Nevertheless, substantial acreage within Westlands Water District (and within WSP itself) has been retired from agriculture because the groundwater drainage problem was too severe (USBR 2006, p. 13-2).

Sampling from perched groundwater (i.e., groundwater in the near-surface soils) conducted by USBR in the mid-2000s found that Total Dissolved Solids (TDS - a measure of groundwater salinity) within the WSP ranged from 1,500 to over 12,000 milligrams per liter (mg/L) (note: 1 mg/L = 1 part per million [ppm]). Over 80 percent of the WSP site indicated TDS levels in excess of 3,000 mg/L, and 40 percent of the site had TDS levels that exceed 6,000 mg/L (USBR 2006, p. 6-3). Few vegetable and fruit crops have salt tolerances in excess of 3,000 mg/L, and few grains can tolerate salt levels exceeding 6,000 mg/L (FAO n.d., p. 135). Subsequent mapping by the California Department of Water Resources (DWR) shows 2012 salinity levels in the near-surface soils to be in the same general range as shown in the 2006 mapping by USBR (DWR 2012). (It is noted that the median salt concentration in surface water delivered from the nearby segment in the California Aqueduct from March 2015 to March 2016 was approximately 350 mg/L [DWR 2016]. The recommended secondary maximum contaminant level (SMCL) set by the California Department of Public Health (CDPH) for TDS in drinking water is 500 mg/L, and the upper limit is 1,000 mg/L (SWRCB 2010a).) It is estimated that 453,000 tons of salt per year are imported to Westlands in irrigation water [Presser 2008, p. 6].) The highly saline soils of the WSP site have placed severe restrictions on crop selection, such that the predominant crops are cotton and salt tolerant grains such as wheat and barley (Shannon 2011).

USBR's sampling of the shallow groundwater for selenium indicated that concentrations within the WSP plan area range up to 50 ppb, with the highest concentrations occurring in the southern half of the plan area (USBR 2006, p. 6-5). The State of California Public Health Goal (PHG) for selenium in drinking water is 30 parts per billion (ppb)(OEHHA 2010)(Note: 1 ppb = 1 microgram per liter [μ g/L]). The U.S. Environmental Protection Agency's (EPA) ambient water quality criterion for protection of aquatic life is 5 ppb selenium (USBR 2006, p. 5-4). Calcium, magnesium, boron, bicarbonates, and chlorides are all present in significant quantities (USBR 2006).

Irrigation Water Supply

Imported Surface Water Supply

Growers within the WSP plan area receive deliveries of federal Central Valley Project (CVP) surface water supplies which are provided through the Westlands Water District (WWD). The total volume of water required for the entire irrigable area of 568,000 acres within WWD is about 1.5 million acre-feet (WWD 2016). Westlands' annual water entitlement from the USBR's Central Valley Project is 1,197,000 acre-feet, or 303,000 acre-feet less than irrigation needs. Thus Westlands' surface water supply entitlement of CVP water is 20 percent short even when 100 percent of the Contract water is available. Some of the difference is made up by well water from the lower aquifer and water transfers (the latter averaging 150,000 acre-feet per year). Under the terms of the 2015 settlement agreement between WWD and DOJ, WWD's annual water deliveries will be capped at 895,000 acre-feet, as discussed above. Thus the annual shortfalls of water supply will be approximately 500,000 acre-feet per year, assuming full delivery of surface water, and annual transfers of 150,000 acre-feet per year.

The west side of the San Joaquin Valley was among the last areas in the Central Valley to receive imported water from the Delta. Since the San Luis Unit was constructed to deliver "surplus Delta water," the existing water users elsewhere in the State either had senior water rights or had a higher priority in the queue to receive Contract water from the federal CVP or the State Water Project. As such, the "south of Delta" contractors suffer disproportionately during drought conditions when water deliveries are curtailed. (It is estimated that under drought conditions, approximately 75 percent of the shortage is the result of actual hydrological drought conditions, and about 25 percent is due to "regulatory drought" factors such as legislatively and/or court-mandated flows for endangered aquatic species and habitat.) This is best illustrated by the recent multi-year drought when WWD receive no CVP water deliveries whatsoever in 2014 and 2015. Between 2006 and 2015, WWD has received its full 100 percent contract entitlement in only one year - 2006. In 8 of those 10 years, WWD received water allocations that were 50 percent or less than its Contract entitlement. The average annual water allocation received during that 10-year period was about 460,000 acre-feet, or 38.5 percent of the contract entitlement (WWD 2016). This represents 31 percent of the total irrigation water requirement (i.e., 1.5 million acre-feet) in the District. The curtailment of surface water deliveries is experienced equally by all of WWD's contractors, including the growers within the WSP plan area.

Groundwater Supply from Lower Aquifer

Given the chronic shortage of surface water supplies, growers within the WWD service area must augment surface water deliveries with pumped groundwater to meet crop irrigation needs. However, sustainable yield of the Westside Subbasin will likely be a lower extraction rate than the historical average. (Estimates of sustainable yield are currently being developed by WWD pursuant to the Sustainable Groundwater Management Act.) In the 30-year period since 1988, groundwater withdrawals within WWD have averaged 273,000 AF per year (WWD 2017). Under drought conditions, groundwater withdrawals can exceed the sustainable yield of the groundwater subbasin, which could result in progressive lowering of the lower aquifer's groundwater table. For example, during the drought years 2012-2016, the annual estimated volume of groundwater pumping averaged 586,000 AF per year (WWD 2017). This resulted in a drop of up to 400 feet in the groundwater table in the lower aquifer between 2011 and 2015 in some areas on the District (WWD 2015a).

Even in years when growers receive 100 percent of their contract entitlement, additional water must be pumped from wells screened in the lower aquifer to meet crop irrigation requirements. The application of the pumped groundwater and imported surface water to crops has resulted in large downward head gradients (i.e., downward pressure on percolating groundwater). As a result, some of the salts and selenium in the near surface soils are leaching deep into the alluvium and increasing the salt and selenium concentrations in the aquifer, which is used for drinking water as well as a source of irrigation water. Although the lower aquifers are hundreds of feet below the surface, the poor quality groundwater is moving downward in response to recharge by irrigation from above the water table and by removal of groundwater via wells screened in the lower aquifer. Sampling of water quality from wells screened in the lower aquifer by WSP landowners indicated that salt (TDS) concentrations in the water bearing zone ranged from 384 to 1280 mg/L (WSPL 2010). All but one sample exceeded the secondary maximum contaminant level (SMCL) of 500 mg/L recommended by the California Department of Public Health (CDPH) for TDS in drinking water. Given the downward flow rate of saline water, it was estimated by the U.S. Bureau of Reclamation in 2006 that the usable average life of the aquifer in Westlands is from 110 to 114 years, assuming continued farming on the physically-impaired lands without a drainage solution (USBR 2006, p. 6-2).

Due to the presence of elevated levels of selenium in the lower aquifer, groundwater pumping also brings additional selenium to the surface. It is estimated that approximately 20,000 lbs. of selenium are pumped to the surface annually within Westlands (Presser 2008, p. 2).

Under drought conditions, the added dependence on groundwater places further physical restrictions on WSP farm operations. Since the salt content of pumped groundwater is two to three times that of imported surface water, the amount of groundwater that can be blended with imported water is limited by the salt tolerance of the crops. In addition to crop salinity tolerances, growers must also be attentive to the physical limits on the amount of increasingly saline water that can be applied since irrigation systems become fowled and plugged if salt content becomes too high. Thus, at a certain salinity level, growers must either obtain additional surface water on the open market to avoid increasing the salinity of blended irrigation water, or idle their land. Under drought conditions, when the purchase price of supplemental water can be three to four times that of Contract water, WSP growers can and have opted to idle the majority of their land. During the drought years of 2012-2016, the annual average amount of

fallowed lands was 172,500 acres, or approximately 28 percent of all the lands in the District (WWD 2017).

Farmland Classification Systems

DOC Important Farmlands Mapping

The California Department of Conservation (DOC) administers and maintains the statewide Farmland Mapping and Monitoring Program (FMMP), under which farmland is mapped by several categories including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance (DOC 2017). The 2016 FMMP mapping for the WSP plan area is shown in Figure AG-2. The categories included in the FMMP are described below, along with the amount of land in each category that occurs within the WSP plan area.

<u>Prime Farmland</u>. Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. The FMMP designates approximately 1,080 acres of the WSP as Prime Farmland, or approximately 5 percent of the total WSP plan area. These mapped areas encompass the Panoche loam and Westhaven soil types, located in the extreme west-central portion of the WSP site.

<u>Farmland of Statewide Importance</u>. 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. The majority of the WSP (approximately 13,017 acres) is designated as Farmland of Statewide Importance, representing approximately 62 percent of the plan area. (Note: Approximately 2,978 acres that are currently mapped as Farmland of Statewide Importance have been removed from irrigated agriculture. It is expected that this acreage will be designated as Grazing Land in subsequent rounds of FMMP mapping.)

<u>Unique Farmland</u>. Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date. No lands within the WSP are designated as Unique Farmland.

<u>Farmland of Local Importance</u>. These comprise farmland of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. No lands within the WSP plan area are designated as Farmland of Local Importance.

<u>Grazing Land</u>. Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for Grazing Land is 40 acres. In the eastern portion of the plan area, there is an area of approximately 6,841 acres (approximately 33 percent of the site area) that is currently designated as Grazing Land. (Note: An additional 2,978 acres within WSP have been removed from irrigated agriculture that is not reflected in the 2016 FMMP mapping. It is expected that this additional acreage will be designated as Grazing Land in subsequent rounds of FMMP mapping.)

<u>Urban and Built-up Land</u>. Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. No lands within the WSP plan area are designated as Urban and Built-up Land.

<u>Other Land</u>. Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. No lands within the WSP plan area are designated as Other Land.

In summary, approximately 5 percent of the lands located in the extreme western portion of the WSP plan area is designated as Prime Farmland under the most recent update of the Farmland Mapping and Monitoring Program for Kings County in 2016. The majority of the plan area (62 percent) is designated as Farmland of Statewide Importance, and 33 percent is designated as Grazing Land (DOC 2017).

County Assessor's Office Definition of Prime Farmland

The Kings County Assessor's Office defines "Prime Farmland" primarily according to assessed crop value, which serves as the basis for the County annual subvention funding request to the State related to the County's implementation of Williamson Act and Farmland Security Zone Contracts. (See descriptions of each below.) As mapped in the County's General Plan Resource Conservation Element (Figure RC-10), the WSP lands defined as Prime Farmland by the County Assessor's Office are concentrated in the northern and west-central portions of the WSP site, and represent about 40 percent of the WSP acreage (Kings County 2010a).

Kings County Priority Agricultural Land Model

The Kings County Community Development Agency has developed a model which considers additional factors in defining the value of prime farmland in order to rank County farmlands on a priority basis. The factors considered in the model include soil classification, crop value, availability of water resources, the need for open space buffers between urban areas, and the planned orderly growth of communities. The resulting mapping of Priority Agricultural Land, as mapped in the General Plan Resource Conservation Element (Figure RC-13) shows the eastern and southeastern portions of the plan area as "Low Priority" or "Very Low Priority" (51% of plan area) and the central portions of the plan area as "Low-Medium Priority" (40% of plan area), while parts of the northerly and westerly portions of the plan area are mapped "Medium Priority" (2% of plan area). No portions of the project site are mapped as "High Priority" Agricultural Lands (Kings County 2010a).



Base map: CDOC, 2017

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WSP Gen-Tie Corridors

The lands crossed by the two WSP gen-tie corridors consist of agriculturally productive lands of the San Joaquin Valley floor. Almost all of the lands crossed by the gen-tie corridors are mapped as Important Farmland (i.e., Prime Farmland or Farmland of Statewide Importance) by the DOC under its Farmland Mapping and Monitoring Program (FMMP). (The FMMP farmland categories are described in the immediately preceding section.) Table AG-2 below shows the acreage of land in the applicable FMMP farmland categories within the planned corridors. Acreage estimates include lands within the 300-foot width of the planned transmission corridors.

As shown in Table AG-2, approximately 97 percent of the lands within the gen-tie corridors are mapped as Important Farmland, including 70 percent Prime Farmland and 27 percent Farmland of Statewide Importance (no lands are mapped as Farmland of Local Importance or Grazing Land). The remaining 3 percent of the corridors are mapped as Non-Agricultural lands (3 percent) such as urban, built-up, disturbed, and vacant lands.

TABLE AG-2

		Important Farmlands ¹ (acres ²)				Non-Agricultural	
Gen-Tie Corridor	Length (Miles)	Prime Farmlands	Farmland of Statewide Importance	Farmland of Local Importance ³	Grazing Land	[Urban, Built-up, Disturbed, Vacant, etc.]	Total Acreage ⁴
WSP-South to Gates Gen-Tie	11.5	335.1	135.8	0	0	16.9	487.8
WSP-North to Gates Gen-Tie	11.5	347.8	127.3	0	0	12.7	487.6
Totals	23.0	682.9	263.1	0	0	29.6	975.6
Percent of Total Corridor Acreage		70%	27%	0%	0%	3%	100%

FARMLANDS WITHIN WSP GEN-TIE CORRIDORS

¹No lands within the gen-tie corridors are mapped as "Unique Farmlands."

²Acreage within 350-foot-wide gen-tie corridors.

³ "Farmland of Local Importance" is not included in the definition of "Farmland" under CEQA Appendix G.

⁴ Excludes areas within existing substation sites that are outside the 350-foot transmission corridors.

Sources: CDOC 2015a, 2017.

Table AG-3 shows cropping patterns within the transmission corridors. As shown in the table, approximately 97 percent of the total acreage within the gen-tie corridors is under cultivation. Approximately two-thirds of this cultivated acreage comprises row crops (cotton, wheat, barley, tomatoes, corn, alfalfa), with the other third consisting primarily of tree crops (almonds, pistachios), along with a relatively small acreage devoted to vineyard crops (grapes).

Con Tio Corridor	Length	Agricultural Use (Acres*)					
Gen-ne corndor	(Miles)	Row Crops (incl. Fallow)	Tree Crops	Vineyards	Grazing Land	Non- Agricultural	Acreage
WSP-South to Gates Gen-Tie	11.5	290.8	159.1	21.1	0	16.8	487.8
WSP-North to Gates Gen-Tie	11.5	335.1	140.0	0	0	12.7	487.8
Totals	23.0	625.9	299.1	21.1	0	29.5	975.6
Percent of Total Corridor Acreage		64%	31%	2%	0%	3%	100%

TABLE AG-3

CROPPING PATTERNS WITHIN WSP GEN-TIE CORRIDORS

* Acreage within 350-foot wide gen-tie corridors. Source: Google Earth 2017.

3.2.2. REGULATORY CONTEXT

<u>State</u>

Williamson Act

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of placing lands within "Agricultural Preserves" thus restricting the use of those lands to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon the value of the land for farming and open space uses as opposed to full market value. The initial term of a Land Conservation Contract is 10 years, with the contracts automatically renewing for an additional year on January 1 of each year. The automatic renewal continues indefinitely unless a notice of non-renewal or contract cancellation is filed. If a non-renewal is filed, the contract then does not renew itself and begins to phase out of the Agricultural Preserve Program over a ten year period with the tax assessment of the property gradually increasing to an amount equal with what would normally be assessed if the property had not been placed under contract. Non-renewals involve no penalties, while contract cancellations are subject to a penalty fee of 12.5 percent of the assessed land value.

<u>1998 Amendments to Williamson Act – Farmland Security Zones</u>

In 1998, the Williamson Act was amended to expand the provisions and include additional tax benefits to agricultural land owners who entered into a 20-year Farmland Security Zone Contract. The same automatic contract renewals occur annually as under Williamson Act contracts. No land can be included in a Farmland Security Zone unless requested by the landowner, and any land located within a city's sphere of influence cannot be included unless the creation has been approved by the city with jurisdiction within the sphere of influence. As with conventional Williamson Act contracts, non-renewals

involve no penalties, while contract cancellations are subject to a penalty fee of 25 percent of the assessed land value.

In general, each Land Conservation Contract or Farmland Security Zone Contract stipulates that the property in an Agricultural Preserve or Farmland Security Zone may not be used for any other purpose than the production of agricultural products for commercial purposes and related uses and compatible uses. Utility corridors such as transmission easements are considered compatible with agricultural uses under the Williamson Act (Government Code Section 51238).

According to the most recent Kings County Agricultural Preserves mapping of October 8, 2013, approximately 26 percent of the WSP plan area is under Williamson Act Land Conservation contracts, and approximately 25 percent is in Farmland Security Zone contracts. These lands comprise all of the irrigated farmland within the WSP plan area. The remaining 49 percent, located in the eastern and southeastern portions of the plan area, is not covered by either program. These lands comprise all of the non-irrigated farmland within the WSP plan area (Kings County 2013).

2011 Amendments to Williamson Act – Solar-Use Easements – SB 618 (Wolk)

Senate Bill 618, which took effect on January 1, 2012, is intended to provide a third method for terminating Williamson Act Contracts (including Farmland Security Zone Contracts), in addition to the non-renewal and cancellation methods described above. In particular, the bill allows for the rescission of existing contracts for the purpose of placing the contracted lands into solar-use easements for the purpose of photovoltaic electricity generation. Contract rescission under Bill 618 is only permitted if it can be shown that the lands are physically impaired or marginally productive for agricultural production. In particular, Section 51191(a)(1) provides that lands are eligible for contract rescission if one of the following criteria is met:

- (A) The land consists predominantly of soils with significantly reduced agricultural productivity for agricultural activities due to chemical or physical limitations, topography, drainage, flooding, adverse soil conditions, or other physical reasons.
- (B) The land has severe adverse soil conditions that are detrimental to continued agricultural activities and production. Severely adverse soil conditions may include, but are not limited to, contamination by salts or selenium, or other naturally occurring contaminants.

If the lands proposed for rescission are designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under the State's Farmland Mapping and Monitoring Program, the determination as to whether the lands qualify for rescission under SB 618 is subject to the prior approval by the Department of Conservation. Upon the County's rescission of Williamson Act Contracts and simultaneous placement of the lands into solar-use easement, the rescission fee of 10 percent of the fair market value of the land is assessed, on Williamson Act lands or Farmland Security Zone lands, half of which is to be deposited in the State General Fund.

The Bill provides that solar-use easements shall restrict the use of the land for photovoltaic generation and incidental uses, either in perpetuity or for a term of not less than 10 years. A solar use easement for a term of years is subject to the same automatic annual self-renewal provisions that apply to other forms of Williamson Act Contracts. A solar-use easement may be extinguished through notice of non-renewal, which will end the automatic renewals, or a landowner may petition the County to approve termination of the easement sooner if the land will no longer be used for photovoltaic solar generation. Alternatively, the landowner may return the land to its previous Land Conservation Contract. Approval of easement termination prior to the running of the 9-year non-renewal period is subject to fees of up to 12.5 percent of the termination value of the land.

The Bill requires that when a solar-use easement is extinguished, the landowner shall restore the land that is subject to the easement to the conditions that existed prior to the placement of the easement on the land. The Bill also requires that the landowner post a performance bond or other securities to fund restoration of the land by the time the easement terminates.

As of this writing (October 2017), the County of Kings had not adopted regulations for the implementation of SB 618 solar use easements within Kings County. However, the Kings County Williamson Act Implementation Procedures, described below, provide for solar development on contract lands where prescribed findings can be made regarding compatibility of solar facilities with continued on-site agricultural use. This is described in detail subsequently in this section.

Kings County

Kings County General Plan

There are two agricultural general plan land use designations that together cover the Westlands Solar Park. These include "General Agriculture – 40 acre" which covers approximately 61 percent of the plan area, and "Exclusive Agriculture – 40 acre" which covers approximately 39 percent of the plan area. The General Agriculture designation generally applies to areas south of Kansas Avenue, and the Exclusive Agriculture designation applies to areas within the flight paths of the Naval Air Station Lemoore. Both of these designations fall under the broader General Plan category of Agricultural Open Space. In addition to a range of agricultural uses and ancillary activities, the General Plan allows solar voltaic generating facilities within the Agricultural Open Space areas of the County, as provided in LU Policy B7.1.3, which is set forth below. Energy producing facilities are allowed in the Exclusive Agriculture zone where such facilities would not create a hazard for aircraft, as set forth in RC Policy A1.2.4, as set forth below.

The 2035 Kings County General Plan includes the following goals, objectives and policies related to agricultural resources that are relevant to the Westlands Solar Park:

Land Use Element

LU GOAL B7 Community benefiting non-agricultural uses remain compatible within the County's Agricultural Open Space area, and are supported for their continued operation and existence.

LU OBJECTIVE B7.1

Allow compatible Open Space and Public uses of land within the Agriculture Open Space area of the County.

LU Policy B7.1.3: Power generation facilities for commercial markets shall be allowed and regulated through the Conditional Use Permit approval process, and include

thermal, wind, and solar photovoltaic electrical generating facilities that produce power.

Resource Conservation Element

- A. <u>Water Resources</u>
 - RC GOAL A1 Beneficially use, efficiently manage, and protect water resources while developing strategies to capture additional water sources that may become available to ensure long-term sustainable water supplies for the region.

RC OBJECTIVE A1.4

Protect the quality of surface water and groundwater resources in accordance with applicable federal, state and regional requirements and regulations.

- RC Policy A1.4.4: Encourage and support the identification of degraded surface water and groundwater resources and promote restoration where appropriate.
- B. <u>Agricultural Resources</u>
 - RC Goal B1 Maintain viable and productive agricultural land within the County, and ensure that long term preservation of the County's agricultural resources continue to provide a sustainable food supply and supports a vibrant local agricultural economy.

RC OBJECTIVE B1.1

Identify the County's highest priority agricultural lands that are critical to the County's agricultural economy, prime soils, and water availability, and emphasize higher preservation efforts for these areas.

RC Policy B1.1.2: Use the Priority Agricultural Model as a reference for determining potential economic and resource impacts related to the loss of agricultural land resulting from conversion to urban uses.

RC OBJECTIVE B1.2

Identify the County's highest priority agricultural lands that are critical to the County's agricultural economy, prime soils, and water availability, and emphasize higher preservation efforts for these areas.

RC Policy B1.1.2: Use the Priority Agricultural Model as a reference for determining potential economic and resource impacts related to the loss of agricultural land resulting from conversion to urban uses.

RC OBJECTIVE B1.3

Establish feasible mitigation for the loss of agricultural land conversion that is not over burdensome to landowner and development interests, yet enhances long term preservation efforts of the County's highest priority agricultural lands.

- RC Policy B1.2.1: Require new development that results in the loss of agricultural lands to provide mitigation to offset the loss. The County's Farmland Mitigation Strategy shall require comparable acreage enrollment in the County's Farmland Security Zone.
- RC Policy B1.2.2: Conversion of agricultural land to urban uses shall require payment of mitigation fees that are based on average per acre fee for the establishment of a new Farmland Security Zone creation. All mitigation costs shall be borne by project proponent(s).
- RC Policy B1.2.3: Under the County's existing system program, mitigation fees shall be used for the creation of new Farmland Security Zone contracts only and applied on willing landowner property that is greater than 10 acres and located within the "Medium," "Medium-High" and "Highest" Priority Agricultural Land as defined under the County's Priority Agricultural Land Model, and within the eligible Department of Conservation farmland classifications as required by the *California Land Conservation Act of 1965.*
- A. Energy Resources

RC OBJECTIVE G1.2

Promote the development of sustainable and renewable alternative energy sources, including wind, solar, hydroelectric and biomass energy.

- RC Policy G1.2.2: Encourage and support efforts to develop commercial alternative energy sources in lower priority agricultural lands within Kings County, when appropriately sited.
- RC Policy A1.2.4: Coordinate the siting of alternative energy facilities within the Exclusive Agriculture (AX) Zone District with the Naval Air Station Lemoore to ensure such facilities will not have the potential to create a hazard for aircraft (e.g. reflective solar panels).

Kings County Development Code

As designated in the Kings County Zoning Plan, the majority of WSP plan area is currently zoned as "General Agriculture (AG-40)" except for approximately 968 acres north of the Kansas Avenue alignment which are zoned "Exclusive Agriculture (AX)." As provided in Article 4 of the Kings County Development Code, both of these agricultural zoning districts specifically allow utility-scale photovoltaic electricity generation as a conditionally permitted use. Both zoning districts have a general minimum parcel size requirement of 40 acres, except that parcel sizes as small as one acre are permitted for a range of uses, including solar voltaic generating facilities, subject to the granting of a conditional use permit (Kings County 2016).

Article 11, Section 1112.B.2 of the Kings County Development Code requires that commercial-scale solar photovoltaic electrical facilities shall be subject to certain specified standards (Kings County 2016). The required standards, and the consistency of WSP solar development with those standards, are addressed under Impact AG-2 below.

With respect to electrical substations and transmission lines, the Kings County Development Code permits electrical substations within agricultural zones without a permit, and transmission lines are subject to review by the zoning administrator (Kings County 2016).

Right-to-Farm Ordinance

The Kings County Code of Ordinances Section 14-36.1, the "Notice of Disclosure and Acknowledgment of Agricultural Land Use Protection and Right to Farm Policies of the County of Kings," (Right-to-Farm) requires that the approvals of rezonings, land divisions, zoning permits, and residential building permits include a condition that notice and disclosure be provided, which is to be recorded with the property title, that specifically acknowledges and notifies all future owners that they are in proximity to agricultural uses, and lists the types of operations and possible nuisances or inconveniences associated with farming such as equipment and animal noises; farming activities conducted on a 24-hour, 7-day a week basis; odors from manure, fertilizers, pesticides, chemicals, or other sources; the aerial and ground application of chemicals and seeds, dust; flies and other insects; and smoke. The ordinance states that the County does not consider normal farming operations involving these activities and effects to be a nuisance, and that current owners and future purchasers should be prepared to accept such annoyances or discomfort from normal, usual, and customary agricultural operations, facilities, and practices. This right-to-farm disclosure and acknowledgement establishes the primacy of agricultural operations over other land uses, and would reduce the potential for conflict which could adversely affect the continued viability of such adjacent agricultural operations (Kings County 1996).

Kings County Williamson Act Implementation Procedures

The Williamson Act stipulates that local governments adopt rules governing the administration of agricultural preserves, including rules related to compatible uses, provided the rules are consistent with the following principles of compatibility (Gov. Code \leq 51231).

Gov. Code § 51238.1(a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:

- (1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserve.
- (2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.
- (3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

As required under the Williamson Act, the County has established procedures for implementation of the Act at the local level. Those implementation procedures include *Uniform Rules for Agricultural Preserves in Kings County*, which identifies the uses that shall be permitted as "Commercial Agricultural Uses," and "Compatible Uses," on lands under Williamson Act contracts, including Farmland Security Zone contracts. Permitted compatible uses include single-family residences, accessory structures, agricultural processing

facilities, gas and oil wells, and public utility and public service structures and buildings, among other uses.

The current Kings County Williamson Act implementing procedures include the following uniform rules for agricultural preserves that pertain to solar photovoltaic facilities:

"Commercial solar photovoltaic system facilities that are designed primarily for the production of electrical energy for third party consumption are not compatible under the provisions of Government Code Section 51238.1(a). For purposes of determining compatibility, a project must be determined consistent with the principles of compatibility under Section 51238.1(a). Ordinarily, a solar project will be found compatible if the applicant provides a soil reclamation plan and financial assurances, and if the economic output of agricultural operations on the contracted parcel or parcels on which the project is located will be 90-percent of pre-project output. However, on November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality and severe groundwater overdrafts, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198, west of State Route 41, and northeast of Interstate 5 that limit the use of much of the land within the territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Notwithstanding the present agricultural use of the land, solar farming as a concomitant use with dry farm seasonal grazing or similar commercial agricultural activity may be deemed a compatible use within this region of the County if the applicant provides a soil reclamation plan and financial assurances, and if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed concomitant commercial agricultural operation is a reasonably foreseeable use of the land (Kings County 2013)."

Fresno County

Fresno County General Plan

Most of the WSP gen-tie corridor length is located in Fresno County, which includes approximately 17 miles of the total 23 miles of transmission corridor. All of the lands traversed by the gen-tie corridors are designated Agriculture in the Fresno County General Plan. The Agriculture and Land Use Element of the General Plan allows electrical substations in Agriculture-designated lands, but transmission lines are not mentioned. Land Use policy LU-A.14 states that mitigation for conversion of productive agricultural land is required where appropriate, but does not specify the nature of the mitigation in policy and there is no corresponding implementing program (Fresno County 2000).

Fresno County Zoning Code

The Fresno County Zoning Code permits electrical substations in agricultural zones subject to Director's review and approval. Privately owned and operated transmission or gen-tie lines that are not subject to CPUC's sole jurisdiction are subject to the County's unclassified conditional use permit procedures under Zoning Code Section 853(B)14 (Fresno County 2011).

3.2.3. Environmental Impact Analysis

SIGNIFICANCE CRITERIA

Based on the State CEQA Guidelines, Appendix G, the project would be considered to have a significant impact upon agricultural resources if it would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use. (Impact AG-1.)
- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract. (Impact AG-2.)
- c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. (Impacts AG-3 and AG-4.)

IMPACTS AND MITIGATION

Impact AG-1. Agricultural Land Conversion

<u>Westlands Solar Park.</u> The WSP plan area includes "Farmland" which would be subject to solar development. (*Less-than-Significant Impact with Mitigation*)

<u>Westlands Transmission Corridors</u>. The WSP gen-tie lines would result in the permanent loss of "Farmland" at tower locations. However, the losses would consist of a number of very small pieces of farmland displaced by the tower footings, which would be dispersed over the length of the corridors and would involve a total of approximately 2 acres of "Farmland" removal throughout the entire 23-mile length of the gen-tie corridors. This small acreage of farmland conversion is not considered a significant loss of "Farmland." (*Less-than-Significant Impact*)

This impact analysis addresses significance criterion 'a' above.

Westlands Solar Park

As discussed in Section 3.2.1 Environmental Setting above, the Department of Conservation's (DOC) FMMP map "Important Farmland Kings County 2014" identifies approximately 1,080 acres within the WSP plan area as Prime Farmland, and about 13,017 acres as Farmland of Statewide Importance, with the remaining 6,841 acres mapped as Grazing Land. Therefore, approximately 14,097 acres are considered "Farmland" under CEQA (based on the 2016 Important Farmland map), with the remaining Grazing Lands not classified as "Farmland."

Impacts to Grazing Land

Under DOC's Farmland Mapping and Monitoring Program, the mapping of lands as Prime Farmland or Farmland of Statewide Importance depends on whether those lands are irrigated. As discussed above, both of these mapping categories include only those lands that have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Within the eastern half of the WSP plan area, there are a total of 9,819 acres that have not been irrigated since the mid-2000s. While 6,841 acres of this area are recognized in FMMP's 2016 Important Farmland map as non-irrigated by the Grazing Land classification, it is expected that the remaining 2,978 acres will be remapped as Grazing Land in the next biennial FMMP mapping cycle. As such, it is anticipated that the 2018 Important Farmland mapping for Kings County will include the mapping of approximately 9,819 acres of the WSP plan area as Grazing Land.

Grazing Land is not considered to fall under the definition of "Farmland" under CEQA Guidelines Appendix G (see item 'a' in *Significance Criteria* above). As such, the conversion of lands mapped as Grazing Land under FMMP to non-agricultural uses is not considered a significant impact under CEQA. Also, all WSP lands mapped as Grazing Lands (or anticipated to be so mapped in the near future) are designated under the Kings County Priority Agricultural Lands Model as "Low-Medium Priority" or lower, and therefore would not require off-site mitigation under the Kings County Development Code. Therefore, at the time of CUP review for individual WSP solar projects, any projects proposed on lands that are mapped as Grazing Land under the then-current Important Farmland Map for Kings County, would result in a *less-than-significant* impact to agricultural resources under CEQA. [Note, however, that any solar projects proposed on such lands that are subject to Williamson Act Contracts or Farmland Security Zone Contracts would be subject to Mitigation Measure AG-1 below. Also, all WSP solar projects, including those on "Grazing Land," are subject to Mitigation Measures AG-2 (soil reclamation) and AG-3 (financial assurance) since these actions are required by the Kings County Development Code.]

Impacts to Irrigated Farmland

While about 11,119 acres (or about 53 percent of the WSP plan area) are irrigated farmlands, these lands are subject to severe physical impairments which reduce their viability for agricultural production. As discussed in Section *3.2.1 Environmental Setting* above, all of the WSP lands are designated as "drainage impaired" under the Bureau of Reclamation's San Luis Drainage Feature Re-evaluation. The designation of drainage impairment reflects the increasing physical impairment of soils due to: ongoing accumulation of salts (in soils that have suboptimal native fertility); perched groundwater and lack of subsurface drainage systems; chronic shortages and unreliability of surface water deliveries; and increasing salinity of groundwater used as a supplemental source of irrigation supplies. In addition, the ongoing drought conditions of recent years has exacerbated these conditions and also resulted in substantial pumping of groundwater and drawdown of the lower aquifer's groundwater table.

Solar Uses Intended to Operate for a Limited Duration of 25 to 30 Years

An important consideration in the evaluation of farmland conversion impacts is whether the alternative use results in a permanent loss of the farmland. As discussed in Chapter *2. Project Description*, the solar PV generating facilities proposed for construction in WSP are estimated to have a productive life of approximately 25-30 years, after which the solar facilities would be decommissioned and the land reclaimed. As such, the use of the WSP lands for solar generation would involve a relatively short-term

commitment to solar generation followed by decommissioning and site reclamation. However, unless individual solar projects are subject to conditions of approval which would set forth specific actions to be undertaken to ensure that effective reclamation is implemented to restore the soils to their pre-project condition, it cannot be concluded with a certainty that such effective reclamation would in fact occur upon decommissioning. As such, the possibility remains that WSP solar development could result in permanent loss farmland over the long-term. Therefore, the potential that WSP solar development would result in the permanent conversion of "Farmland" (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) to non-agricultural uses represents a *potentially significant impact*.

Agricultural Production to Occur Concomitantly with Solar Use on Each Solar Project

Since solar arrays are mounted on posts and raised several feet above ground level, less than 10 percent of typical SGFs are subject to coverage by equipment, buildings, and internal driveways. The remaining 90 percent remains as pervious surfaces which are planned be revegetated with native grasses. In order to maintain site conditions that are conducive to continued agricultural production concomitantly with solar use, the pervious areas of the sites are intended to be managed as non-irrigated pasture for sheep grazing. In this way, agricultural production on the solar facility sites is to be maintained for the life of each solar operation. However, unless individual solar projects are subject to conditions which would set forth specific actions to be undertaken to ensure that agricultural production occurs throughout the life of each solar project, it cannot be concluded with a certainty that such agricultural production practices would be established and maintained on a continuing basis. As such, the possibility remains that WSP farmland may be subject to short term or temporary conversion during the life of the WSP solar projects. Therefore, the potential that WSP solar development would result in the short-term or temporary conversion of Prime Farmland, Or Farmland of Statewide Importance to non-agricultural uses represents a *potentially significant impact*.

In summary, due to adverse physical conditions which place severe constraints on agricultural productivity on WSP farmlands, the viability of agricultural production within irrigated areas of WSP is substantially reduced. In addition, the intent of WSP solar development is to prevent the permanent conversion of Farmland by reclaiming each solar project site upon decommissioning, and to avoid temporary conversion of Farmland during solar project operation by continuing agricultural production on each site, and to prevent the permanent conversion of farmland by reclaiming each solar project site upon decommissioning. The temporary and permanent protection of Farmland would be ensured through implementation of Mitigation Measures AG-1, AG-2, and AG-3 below, which would reduce the impact to Farmland to *less than significant*.

WSP Gen-Tie Corridors

As discussed in Section *3.2.1. Environmental Setting*, approximately 97 percent of the land area within the planned gen-tie corridors consists of Farmland, including predominantly Prime Farmland. Cultivated lands also make up about 97 percent of the total corridor land area, of which approximately two-thirds is in row crops and one-third is in tree crops and vineyards.

The construction of the gen-tie lines would involve temporary disturbance of agricultural operations where farmlands would be traversed by temporary construction access driveways, pulling and tensioning sites, and potentially construction staging and storage areas. While these construction activities would result in

temporary impacts to agricultural operations, they would not result in permanent loss of farmland. The temporary construction impacts to agricultural operations are addressed under Impact AG-3 below.

Permanent loss of Farmland would occur only at the tower footings. Each monopole would be supported by a cylindrical poured concrete footing up to 10 feet in diameter, resulting in the direct displacement of up to 78.5 square feet of Farmland by each footings. For purposes of this analysis, it was assumed that vegetation clearance areas would extend 10 feet outward from each footing. While the agricultural soils in these clearance areas would not be lost, the agricultural production within these areas would effectively cease. Beyond these clearance areas, agricultural cultivation would continue unimpeded. The combined area occupied by the footing and clearance area at each monopole site would total 707 square feet. Based on these parameters, the Farmland loss estimates for the gen-tie projects are shown in Table AG-4.

TABLE AG-4

ESTIMATED LOSS OF FARMLAND IN WSP GEN-TIE CORRIDORS

	Total Number of Monopoles	Total Area of Displacement at Each Monopole Site (acres)	Total Displacement (acres)	Percentage of Gen-Tie Corridors in Areas Mapped as "Farmland"*	Total Farmland Loss (acres)
Gen-Tie Corridors	115	0.01623 ac.	1.87 ac.	97%	1.81 ac.

* As mapped by the Department of Conservation, Farmland Monitoring and Mapping Program in 2014 (Fresno County), and 2016 (Kings County). Farmland includes Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, although the latter are not found in the transmission corridors. Farmland of Local Importance is not included in the definition of "Farmland" in CEQA Guidelines Appendix G).

Assumptions:

1. Total length of gen-tie corridors = 23.0 miles.

2. Monopoles per mile of corridor = 5.0 on average.

3. Permanent displacement area at each monopole site = 707 sq. ft. (0.01623 acres).

Upon completion of the gen-tie projects, it is estimated that approximately 1.81 acres of Farmland would be permanently displaced by monopole footings and surrounding clearance areas. These losses would consist of a 115 very small pieces of Farmland which would be dispersed over the 23-mile total length of the gen-tie lines. Given the very small acreage of overall Farmland that would be lost, and the dispersed nature of the loss, the impact to Farmland would not be significant.

In summary, the impact of the WSP gen-tie projects on Farmland would be *less than significant*.

Mitigation Measures:

<u>Westlands Solar Park</u>. In order to reduce the impacts of WSP solar projects to "Farmland" within the WSP plan area to less-than-significant levels, MMs AG-1, AG-2, and AG-3 shall be implemented in conjunction with each WSP solar project that is mapped as "Prime Farmland", "Unique Farmland", or

"Farmland of Statewide Importance" under the version of DOC's "Important Farmland Kings County" map that is current at the time of approval of the CUP application of that WSP solar project. In addition, all WSP solar projects shall implement MM AG-2 and AG-3 pursuant to the Kings County Development Code.

- MM AG-1 Agricultural Management Plan. Prior to the issuance of a building permit for each WSP solar project proposed on "Farmland," the applicant shall submit to Kings County an Agricultural Management Plan (AMP) that provides for the ongoing agricultural productivity of the site for the life of the project. The AMP shall specify that at least 90 percent of the site shall be vegetated with grasses and forbs and shall be managed for dry farm seasonal sheep grazing. The AMP shall include specific provisions for soil preparation and revegetation including specifications for a seed mix which is appropriate to the soil and climatic conditions in the absence of irrigation, methods of avoiding invasive species, and a list of acceptable vegetation that meets the dietary needs of sheep. The AMP shall include detailed provisions to ensure the successful establishment of the planned vegetative cover, and shall identify appropriate maintenance activities, including conditions under which herbicides may be used, and particularly the identification and selection of herbicides that are non-toxic to livestock and wildlife. The AMP shall also comply with the requirements of the Kings County Development Code related to weed abatement and pest control.
- MM AG-2 Soil Reclamation Plan. Prior to the issuance of a building permit for each WSP solar project proposed anywhere within the WSP Plan Area, the applicant shall submit, for review and approval by the Kings County Community Development Agency, a Soil Reclamation Plan (Plan) for the restoration of the project site at the end of its useful life. The Plan shall contain an analysis of pre-construction conditions of the solar generating facility site, the site shall be photographically documented by the applicant prior to the start of construction. The Plan shall contain specific measures to restore the soil to approximate its pre-project condition, including (1) removal of all aboveground and below-ground project fixtures, equipment, and non-agricultural driveways, (2) tilling to restore the sub-grade material to a density and depth consistent with its pre-project condition, (3) revegetation using Kings County-approved grasses and forbs seed mixture designed to maximize revegetation with noninvasive species shall be broadcast or drilled across the project site, (4) application of a weed-free mulch spread, as needed, to stabilize the soil until germination occurs and young plants are established to facilitate moisture retention in the soil. Whether the project area has been restored to pre-construction conditions shall be assessed by Kings County staff. All waste associated shall be disposed of or recycled in accordance with applicable laws. The applicant shall verify the completion of reclamation within 18 months after expiration of the project use permit with Kings County Planning Division staff. [Note: This mitigation measure would be a requirement for all WSP solar development under the Kings County Development Code which requires reclamation of all solar facility sites upon decommissioning.]
- MM AG-3 <u>Financial Assurance</u>. Prior to the issuance of a building permit for each WSP solar project anywhere within the WSP Plan Area, the applicant shall post a performance or

cash bond, submit a Certificate of Deposit, submit a letter of credit, or provide such other financial assurances acceptable to the County, in an amount provided in an Engineer's Cost Estimate, approved by the Kings County Community Development Agency, to ensure completion of the activities under the Soil Reclamation Plan. Every 5 years from the date of completion of construction of the project, the applicant shall submit an updated Engineer's Cost Estimate for financial assurances for the Plan, which will be reviewed every 5 years by the Kings County Community Development Agency to determine if the amount of the assurances is sufficient to perform reclamation of the project. The amount of the assurances must be adjusted if, during the five-year review, the amount is determined to be insufficient to implement the Plan. [Note: This mitigation measure would be a requirement for all WSP solar development under the Kings County Development Code which requires financial assurance for reclamation of all solar facility sites upon decommissioning.]

By requiring that agricultural production is to continue on 90 percent of each WSP solar project proposed on lands mapped as "Farmland" by DOC, in the manner specified in the Agricultural Management Plan in Mitigation Measure AG-1, the impact from the temporary and concomitant use of the "Farmland" within the WSP plan area for non-agricultural uses would be reduced to a less-than-significant level during the operational life of the project.

By requiring that each WSP solar facility site be restored to its pre-project baseline conditions following decommissioning of the facility, pursuant to the Soil Reclamation Plan specified in Mitigation Measure AG-2, and as ensured by the accompanying Financial Assurance stipulated in Mitigation Measure AG-3, the impact from the potential permanent conversion of all agricultural land within the WSP plan area to non-agricultural use would be reduced to a less-than-significant level. In conclusion, with the incorporation of the above-specified agricultural mitigation measures into each the WSP solar project, the potential impact to agricultural land resulting from WSP solar development would be *less than significant*.

WSP Gen-Tie Corridors. No mitigation is required.

Impact AG-2. Conflict with Agricultural Zoning and Williamson Act

<u>Westlands Solar Park</u>. The proposed solar land use is consistent with the existing Kings County agricultural zoning for the plan area, under which utility-scale solar development is a conditionally permitted use. Substantial portions of the WSP plan area are under Williamson Act or Farmland Security Zone Contracts; therefore, WSP solar projects would represent a potentially significant impact to contracted lands unless the solar projects meet the County's compatibility criteria for development on properties subject to Williamson Act programs. (*Less-than-Significant Impact with Mitigation*)

<u>WSP Gen-Tie Corridors</u>. Transmission lines are considered compatible uses under the Williamson Act, and are permitted uses in the applicable agricultural zoning districts in Kings and Fresno Counties, where the gen-ties corridors are located. (*Less-than-Significant Impact*)

This impact analysis addresses significance criterion 'b' above.

Westlands Solar Park

Williamson Act

As discussed in Section 3.2.1 Environmental Setting above, approximately 23 percent of the WSP site is under Williamson Act Land Conservation contracts, and approximately 30 percent of the site is under Farmland Security Zone (FSZ) contracts, with the remaining acreage covered by neither program. (It is noted that all of the contracted land is classified as Prime Farmland or Farmland of Statewide Importance by the FMMP.) For the 47 percent of WSP lands that are not under Williamson Act or FSZ contracts, the solar development of these lands would not conflict with such contracts. (It is noted that all of the non-contracted land consists of Grazing Land as classified by the FMMP.) Therefore, the Williamson Act impacts of WSP solar development on lands not under contract would be less than significant.

For WSP solar projects on lands that are under Williamson Act or FSZ contracts at the time they are proposed for construction, it is anticipated that these solar projects would avoid conflict with the contracts by maintaining a use on each project site that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations on the project site. This is discussed in detail below in terms of the applicable sections of the Government Code.

Government Code Section 51238.1 (a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:

(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted land in agricultural preserves.

Discussion. The productive agricultural capability of each WSP solar project site subject to Williamson or FSZ contracts would be maintained during the life of each project by implementation of an Agricultural Management Plan (AMP) as required under MM AG-1 above for land classified as "Farmland" under FMMP. [Note: All WSP lands subject to Williamson or FSZ contracts are mapped as "Farmland."] Each AMP would specify the ongoing maintenance of vegetative cover over the site for sheep grazing. Since approximately 90 percent of each solar project site would be maintained in vegetated cover, the use of the sites for solar generation would not prevent the productive concomitant agricultural use of the sites during solar facility operation. The very light footprint of the solar generating facilities on each site would allow for the preservation of native soil cover in place and allow for low impact removal of solar arrays and electrical equipment at the end of each facility's productive life. The long-term productive agricultural capability of each site after decommissioning of the solar generating facility would be ensured through implementation of Mitigation Meas ure AG-2 which requires implementation of a Soil Reclamation Plan and contains detailed provisions on decommissioning, soil conditioning, revegetation, waste disposal, monitoring, and follow-up

measures to ensure that each solar facility site has been effectively restored to pre-project conditions.

Solar facility operations would generally involve low levels of on-site activity consisting of occasional visits by maintenance crews, and periodic visits by panel cleaning and vegetation maintenance crews. Traffic generation would be very light, thus minimizing the potential for conflicts with agricultural vehicles and equipment on public roadways. Dust generation during project operations would not occur since the project would include no exposed soils that could be mobilized as windborne dust (e.g., 90 percent of each site would be vegetated; approximately 9 percent of each site would consist of durable dust free driveway surface as required by the Kings County Improvement Standards, and about 1 percent of each site would be covered by impervious surfaces of equipment pads).

The potential introduction of invasive weed species by the solar projects would be minimized through revegetation of sites the in accordance with the Agricultural Management Plan required for each solar project under Mitigation Measure AG-1, which requires revegetation with weed-free seed mix and weed free mulch. The introduction of weeds would be further minimized through implementation of the Weed Abatement Plan required under Article 11, Section 1112.B.2.e of the Kings County Development Code. The County's Right-to-Farm Ordinance would ensure that adjacent and nearby agricultural operations are not constrained by the need to reduce or eliminate minor incidental effects of cultivation upon adjacent and nearby solar facility operations. During project construction and decommissioning, the disturbance of soil could potentially generate dust. However, these project phases would be temporary in duration, typically lasting one year or less. Thus the impact of potential dust generation on the long-term productive agricultural capability of adjacent and nearby lands would not be significant. The less-than-significant impact with respect to dust generation would be further reduced through implementation of Dust Control Plans to be approved by the San Joaquin Valley Air Pollution Control District prior to commencement of ground disturbing activities on each solar project site, pursuant to Air District Rule 8021.

(2) The use will not significantly displace or impair current or other reasonably foreseeable agricultural operations. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.

<u>Discussion</u>. In accordance with Government Code Section 51231, Kings County has adopted procedures for implementing the Williamson Act at the local government level, including rules related to compatible uses that are consistent with the Williamson Act's principles of compatibility. As discussed in Section *3.2.2. Regulatory Context* above, the current Kings County Williamson Act implementing procedures provide the following specific guidance in considering the compatibility of solar photovoltaic facilities in agricultural preserves:

"Ordinarily, a solar project will be found compatible if the applicant provides a soil reclamation plan and financial assurances, and if the economic output of agricultural operations on the contracted parcel or parcels on which the project is located will be 90-percent of pre-project output. However, on November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality and severe groundwater overdrafts, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198, west of State Route 41, and northeast of Interstate 5 that limit the use of much of the land with the territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Notwithstanding the present agricultural use of the land, solar farming as a concomitant use with dry farm seasonal grazing or similar commercial agricultural activity may be deemed a compatible use within this region of the County if the applicant provides a soil reclamation plan and financial assurances, and if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed concomitant commercial agricultural operation is a reasonably foreseeable use of the land (Kings County 2013).

The following is a point-by-point evaluation of the consistency of WSP solar development with the above County guidance.

First, the entire WSP plan area is located within the area identified in Board of Supervisors' Resolution No. 13-058 as being subject to circumstances, such as reduced surface water deliveries and impaired soil conditions, which limit the use of much of this land to dry farm seasonal grazing as a reasonably foreseeable use of the land.

Second, as discussed under Impact AG-1 above, Mitigation Measure AG-2 would require the implementation of a Soil Reclamation Plan for each solar project, and Mitigation Measure AG-3 would require the provision of financial assurances for implementation of the Soil Reclamation Plan.

Third, as discussed in Chapter 2. Project Description, it is anticipated that each WSP solar project will retain permeable soil over 90 percent of its site area, which is to be vegetated with native seed mix for dry farm seasonal sheep grazing (which constitutes a reasonably foreseeable use of the land, as discussed in the first item above).

Fourth, it is anticipated that substantial evidence will be provided for each WSP solar project that confirms the project site is subject to reduced surface water availability, limitations due to groundwater quality and availability, and impaired soil conditions, such that dry farm seasonal grazing is a reasonably foreseeable use of the land. These conditions are discussed in turn below.

<u>Surface Water Supply</u>. The WSP plan area is dependent upon imported CVP deliveries through Westlands Water District (WWD). For a number of years, the WWD has been subject to curtailment of delivered water, ongoing drought conditions, environmental regulations, and the low priority position of the WWD, compared to other CVP contractors, in receiving its federal contract water during years of water shortage. Consequently, during the last 10 years, WWD received an average of 29 percent of its contract water, and in 2014 and 2015 WWD received 0 percent allocation of CVP water. The chronic shortages and unreliability of surface water supply results in ongoing uncertainties regarding the viability of irrigated agriculture within the WSP plan area.

<u>Groundwater Availability</u>. Westlands Water District is in the process of developing the sustainable yield of the subbasin through its compliance efforts under the Sustainable Groundwater

Management Act (SGMA)(see Section *3.8. Hydrology and Water Quality* for a description of SGMA). Once the sustainable yield number is determined, the yield per acre will vary somewhat throughout WWD depending on localized hydrogeology. During years when sufficient surface water supplies are available for irrigation, the crops typically grown within the WSP plan area include: cotton (which requires 2.5 acre-feet per acre per year of irrigation water), wheat, tomatoes, onions, and other field and truck crops (~1.5-2.0 af/ac/yr), and tree crops (~2.5-3.0 af/ac/yr) (WWD 2013b). The average District-wide water requirement for irrigation is approximately 2.10 af/ac/yr. Thus, during years when surface water deliveries are curtailed, groundwater pumping makes up the difference in supporting these crops. WWD reliance on groundwater in low allocation years is beyond the sustainable yield and results in progressive lowering of the water table and is not sustainable long term. (It is worth noting that reduced reliance on groundwater resources for crop production elsewhere within WWD.)

<u>Groundwater Quality</u>. As discussed in Section *3.2.1. Environmental Setting* above, groundwater from lower aquifer within and near the WSP plan area contains elevated concentrations of sodium, chloride, and boron, which limit the volumes of groundwater that can be applied given the limited tolerance of crops to these elements. Therefore, growing crops utilizing solely groundwater is not feasible.

Soil Conditions. Soil sampling and testing conducted on a parcel in the northeast corner of the WSP plan area in 2015 confirmed that the native soils of the site have excessive salt concentrations. All but two samples indicated salt levels in excess of 2,000 mg/L, which is considered the maximum acceptable concentration for agriculture, and several samples indicated levels that were 2 and 3 times the threshold level for crops. All samples also contained excessive levels of boron, which is toxic to plants and results in stunted growth and reduced yields (Provost & Pritchard 2014). The yields of all crops are reduced commensurate with increasing salinity, and crops with low tolerances to salinity cannot be grown. The naturally high soil salinity is increased through cyclic application and evaporation of irrigation water, which leaves precipitated salts behind. These conditions are exacerbated by high groundwater levels and poor natural drainage which results in high salt concentrations remaining in the near-surface soils. The short supply of high quality imported water limits the amount of surface water that can be applied to pre-irrigate the soil to leach out some salts. Even so, the application of imported irrigation water exacerbates the problem and can result in water logging in the root zone of crops. When groundwater levels become too high, growers must employ rotational fallowing in order to allow the accumulated saline groundwater to recede. These long term soil salinity conditions are expected to increase due to lack of a subsurface drainage system and a sustainable leachate disposal outlet.

The lab report on the parcel in the northeast corner of the WSP plan area concluded that due to severe limitation of reliable water availability and significant impairment of soil quality due to high salinity, the site is not suitable for sustaining long-term agricultural crop production, and that a reasonably foreseeable agricultural use of the site would be dry land farming with seasonal grazing (Provost & Pritchard 2014). These physical impairments to agricultural production prevail throughout the WSP plan area, as documented in the studies and ongoing monitoring discussed in Section *3.2.1. Environmental Setting.* As part of the Conditional Use Permit applications for each WSP solar project proposed on lands under Williamson Act or FMZ contracts, the project applicant would be required

by Kings County to submit evidence to confirm that these physical impairments to irrigated agriculture occur on the project site, in order to support the Williamson Act compatibility finding that a reasonably foreseeable agricultural use of the site would be dry land farming with seasonal grazing.

(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

<u>Discussion</u>. Each WSP solar project will be a self-contained solar generating facility that would not include electrical infrastructure with excess capacity that could be used to support similar solar generating facilities on adjacent contracted land. The two switching stations and gen-ties planned for WSP would be constructed only as needed to support incremental development of WSP solar projects over time, and would not include extra capacity (i.e., in the new gen-tie lines) that could support additional solar development in the area. Likewise, system upgrades elsewhere on the grid that may be needed to support WSP solar generation would be sized to meet project requirements only and would not include excess upgrades that might accommodate or support other solar generation in the area. WSP solar development would not result in the construction of new roadways, beyond internal maintenance driveways, that would provide new vehicular access to adjacent contracted land. Since WSP solar development would not include any excess infrastructure service capacity that could serve adjacent contracted land, it would not induce the owners of such lands to remove adjacent contracted lands from agricultural use due to newly available support facilities.

Unlike urban development, the solar generating facility would not induce other development nearby, either for the purpose of providing support services or for taking advantage of services provided by the project. Solar generating facilities neither provide nor require urban services and therefore would not attract or induce other development nearby. Moreover, such urban development would not be permitted on adjacent or nearby lands under the applicable agricultural zoning, and thus the project would not result in the removal of agricultural preserves from adjacent contracted land through urban growth inducement.

As discussed under Subsection (1) above, the low intensity of solar facility operations would generally minimize the potential for operations-related impacts to adjacent agricultural lands. Therefore, the project would not result in the removal of adjacent contracted land by way of introducing an incompatible land use to the site.

In summary, the WSP solar development would satisfy all of the Williamson Act principles of compatibility, as further defined by Resolution of the Kings County Board of Supervisors, for land use proposed on lands under Williamson Act or FSZ contracts in effect within the WSP plan area.

In summary, given the adverse physical conditions that impair irrigated agriculture throughout the WSP plan area, it is anticipated that individual solar projects proposed on lands subject to Williamson Act or FMZ contracts will satisfy the Kings County Williamson Act principles of compatibility. Upon submittal of evidence to confirm the presence of such adverse conditions on each affected WSP solar project site at the time of Conditional Use Permit issuance, and with the implementation of Mitigation Measures AG-1, AG-2, and AG-3, the potential for conflicts with the Williamson Act would be *less than significant*.

Agricultural Zoning

The majority of WSP plan area is currently zoned as "General Agriculture-40 (AG-40)," except for approximately 968 acres north of the Kansas Avenue alignment which are zoned ""Exclusive Agriculture (AX)." As provided in Article 4 of the Kings County Development Code, utility-scale photovoltaic electricity generation is a conditionally permitted use in both of these agricultural zoning districts. As such, the WSP solar projects would be consistent with the County's agricultural zoning for the site upon the granting of Conditional Use Permits for each solar project. Therefore, the impact of WSP solar development in terms of consistency with agricultural zoning would be *less-than-significant*.

Article 11, Section 1112.B.2 of the Kings County Development Code requires that the granting of Conditional Use Permits for solar photovoltaic electrical facilities shall conform to specified standards. These standards are set forth below, along with a discussion of the conformance of WSP solar development with each standard.

a. The proposed site shall be located in an area designated as either "Very Low Priority," "Low Priority," or "Low-Medium Priority" land according to Figure RC-13 Priority Agricultural Land (2035 Kings County General Plan, Resource Conservation Element, page RC-20). "Medium Priority" land may be considered when comparable agricultural operations are integrated, the standard mitigation requirement is applied, or combination thereof.

Discussion. As described in Section 3.2.1. Environmental Setting, General Plan Resource Conservation Element (Figure RC-13) shows the eastern and southeastern portions of the WSP plan area as "Low Priority" or "Very Low Priority" (51% of plan area) and the central portions of the plan area as "Low-Medium Priority" (40% of plan area), while parts of the northerly and westerly areas of the plan area are mapped "Medium Priority" (7% of plan area), with small areas near the west boundaries mapped as "Medium-High Priority" (2% of plan area). (As discussed below, all of the lands mapped "Medium Priority" are also classified as "Farmland" under the FMMP, and therefore would be subject to Mitigation Measure AG-1 requiring concomitant agricultural use of the solar facilities sites on these lands.) No portions of the WSP plan area are mapped as "High Priority" Agricultural Lands. Since the WSP solar projects located on "Medium Priority" land would be integrated with a reasonably foreseeable agriculture use on the sites, they would satisfy the finding applicable to "Medium Priority" land. As required under Mitigation Measure AG-1, above, 90 percent of the site areas would be vegetated with native grasses for dry farm seasonal sheep grazing, in accordance with the Agriculture Management Plan (AMP) to be implemented in conjunction with the projects located on "Farmland." As required under Mitigation Measures AG-2 and AG-3, above, the project proponent would be required to prepare a Soil Reclamation Plan and provide Financial Assurance, both of which would be completed and subject to County approval prior to issuance of building permits for the project.

The 2 percent (~400 acres) in the western corner the WSP plan area that is mapped as "Medium-High Priority" Agricultural Lands under the Resource Conservation Element would be subject to this standard. However, at such future time when these lands are proposed for solar development, changes to site conditions are anticipated which would result in the removal of these lands from the "Medium-High Priority" designation. Stated differently, it is assumed that these lands would be permanently removed from irrigated agriculture, such that these lands would qualify for

redesignation to "Medium Priority" or a lower designation on the Priority Agricultural Land map of the Resource Conservation Element. Moreover, since these lands would continue in agricultural production for sheep grazing under Mitigation Measure AG-1, and would not be converted to nonagricultural use, it is unlikely that this standard would apply to the "Medium-High Priority" lands in any case. As discussed above, solar development of "Medium Priority" lands would clearly conform to the applicable zoning standard with implementation of Mitigation Measure AG-1.

- b. The proposed site shall be located within 1 mile of an existing 60 KV or higher utility electrical line. Small community commercial solar projects (less than or equal to 3 MW) may be located more than 1 mile from a 60 kV or higher transmission line subject to the following findings:
 - The project site is located on low or very low priority farmland.
 - The project site is not restricted by a Williamson Act or Farmland Security Zone contract.
 - The project will connect to existing utility infrastructure without building new power lines.
 - The project will not result in any additional easements on agricultural land, other than access easements or easements within the public Right-of-Way.

Discussion. An existing 70-kV sub-transmission electrical line runs in a north-south direction along the 25th Avenue alignment through the eastern portion of the WSP plan area. An existing 230-kV transmission line extends southwestward from the northern tier of sections in the WSP plan area. All but one of the WSP subareas/SGF sites shown in Figure PD-3 are located within 1 mile of one of these two transmission lines. The exception is Subarea 12 which is located at the extreme western end of the WSP plan area, at the northeast corner of Avenal Cutoff Road and Nevada Avenue. However, prior to the development of this SGF site, it is anticipated that the 230-kV "WSP-South to Gates Gen-Tie" will have been completed. Thus, at the time when a Conditional Use Permit is submitted for Subarea 12, the site will be within 1 mile of a 230-kV transmission line. In addition, the planned "WSP-North to Gates Gen-Tie" and internal gen-ties within WSP will be incrementally completed to serve all subareas. Therefore, all subareas/SGF sites within the WSP plan area would conform to the standard requiring location within 1 mile of an existing 60-kV line or higher.

c. Agricultural mitigation shall be proposed for every acre of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance converted for a commercial solar facility. The agricultural mitigation shall preserve at a ratio of 1:1 an equal amount of agricultural acreage of equal or greater quality in a manner acceptable to the County for the life of the project. Agricultural mitigation on land designated "Medium-High" or higher priority land shall preserve an equivalent amount of agricultural acreage at a ratio of 2:1.

<u>Discussion</u>. Approximately 67 percent of the WSP plan area is mapped as Prime Farmland or Farmland of Statewide Importance under the Department of Conservation's Farmland Mapping and Monitoring Program. However, as discussed above, WSP solar development would include continued agricultural use, in the form of dry farm seasonal sheep grazing on more than 90 percent of each solar project site, concomitantly with the solar facility use, within these areas. As discussed, dry farm seasonal sheep grazing is a reasonably foreseeable agricultural use of the site under the compatibility principles of the Williamson Act, and thus would not be considered a conversion of farmland to a non-agricultural use. The Agricultural Management Plans required for each solar project within this area under Mitigation Measure AG-1, would ensure the maintenance of seasonal sheep grazing on each solar project site for life of the project. Mitigation Measures AG-2 and AG-3 would ensure that

soils of each solar project site are reclaimed to pre-project conditions upon decommissioning of the solar facility. Therefore, WSP solar development would not result in the conversion of Prime Farmland or Farmland of Statewide Importance to non-agricultural use, and no further agricultural mitigation would be required. As such, this standard is not applicable to the proposed project.

d. The project shall include a reclamation plan and financial assurance acceptable to the County that ensures the return of the land to a farmable state after completion of the project life, and retains surface water rights.

<u>Discussion</u>. As discussed above, Mitigation Measures AG-2 and AG-3 would require soil reclamation plans for all WSP solar projects along with financial assurance to ensure their implementation. The soil reclamation plans and financial assurance would be subject to approval by the Kings County Community Development Agency prior to the issuance of construction permits. Based on these facts, each WSP solar project would meet this standard.

e. The project shall include a pest management plan and weed abatement plan to protect adjacent farmland from nuisances and disruption.

Discussion. All WSP solar projects would prepare and implement Pest Management Plans and Weed Abatement Plans, as required under the County Development Code. The Weed Abatement Plans would specify that the approved seed mixes used to revegetate the each solar project site are free of weeds. The plans would also ensure that combustible vegetation on and near the project boundaries would be actively managed during the construction and operational phases to minimize fire risk. Vegetation height would be kept low to the ground through a combination of sheep grazing and mechanical equipment. The gravel driveways to be constructed around the project perimeters would provide fire breaks. Herbicides would be applied if warranted by site conditions as specified in the Weed Abatement Plans, but would be restricted to those considered environmentally safe. The Pest Management Plans would reduce the potential for pests to inhabit the project sites. The Pest Management Plans would set action thresholds, identify pests, specify prevention methods as a first course of action, specify control methods as a second course of action, and establish a quantitative performance goal of nuisance reduction to adjacent farmland. Rodenticide would be selected and used in a manner that minimizes impacts to protected biological species. Since each WSP solar project would be required to implement these measures under its Pest Management Plan and Weed Abatement Plan, this standard would be met for each solar project.

f. The project shall space internal access driveways per Kings County Fire Department Standards.

<u>Discussion</u>. As required, each WSP solar project space internal access driveways *per Kings County Fire Department Standards*. Therefore, this standard would be met for each WSP solar project.

g. The project shall include a solid waste management plan for site maintenance and disposal of trash and debris.

<u>Discussion</u>. For each WSP solar project, a solid waste management plan would be prepared to prescribe internal procedures for site maintenance and collection and disposal of solid waste during project construction and operation. The non-hazardous waste generated during construction and

operation would be segregated on-site for recycling or disposal at a Class III landfill. Hazardous wastes generated during project construction and operation would be either recycled or disposed of at a Class I disposal facility, as required. With the preparation and implementation of a solid waste management plan for each solar project, this standard would be met.

h. The project site shall not be located on Williamson Act or Farmland Security Zone contracted land, unless it meets the principles of compatibility under Government Code section 51238.1(a). Otherwise, the contract shall be proposed for cancellation.

<u>Discussion</u>. As noted above, approximately 51 percent of the WSP plan area is under Williamson Act contract or Farmland Security Zone contract, with the remaining 49 percent consisting of non-contracted lands. As discussed in detail above, the WSP solar projects on contracted lands would satisfy all of the Williamson Act principles of compatibility, as further defined by Resolution of the Kings County Board of Supervisors, for solar projects proposed on lands under Williamson Act or FSZ contracts. With the principles of compatibility satisfied for each WSP solar project on contracted lands, this standard would be met

In summary, WSP solar development would be consistent with the Kings County zoning for the WSP plan area, and would meet all of the prescribed standards required in the Kings County Development Code for the granting of Conditional Use Permits for solar generating facilities. Therefore, the impact of WSP solar development with respect to conflicts with existing zoning for agricultural use, or a Williamson Act contract would be *less than significant* with implementation of Mitigation Measures AG-1, AG-2, and AG-3.

WSP Gen-Tie Corridors

Williamson Act

Almost all of the lands traversed by the planned gen-tie lines are under Williamson Act contracts or Farmland Security Zone contracts. Under California Government Code Section 51238, electric facilities are deemed to be compatible uses within any agricultural preserve under the Williamson Act, including Farmland Security Zones. Therefore, the transmission corridors would not conflict with the Williamson Act, and the impact would be *less than significant*.

Agricultural Zoning

For utilities subject to state regulatory authority, the California Public Utilities Commission (CPUC) has primary jurisdiction over construction, operation, and maintenance of public utility facilities, including transmission lines and electrical substations. Since local governments do not have discretionary authority over public utility projects, transmission lines are exempt from local land use and zoning regulations and discretionary permit requirements (e.g., conditional use permits). However, CPUC General Order 131-D, Section III.C. requires utilities to consult with local government agencies regarding land use matters. It also requires utilities to comply with local ministerial permit requirements, including building permits, grading permits, and encroachment permits. Transmission lines and gen-ties that are privately owned and operated are not subject to CPUC jurisdiction and would require discretionary approval from the affected county. Federally-sponsored transmission projects are largely exempt from state and local permit requirements, but must consider local regulations prior to construction (40 U.S.C. § 3312.)

Within the Kings and Fresno Counties, where the gen-tie corridors are located, almost all lands within the corridors are designated for agricultural land uses under the county general plans and zoning ordinances or development codes. At the county General Plan level, electrical transmission lines are not mentioned in the General Plans of either county (Fresno County 2000, Kings County 2010). Under the Kings County Development Code, transmission lines are subject to review by the zoning administrator (Kings County 2016). Under the Fresno County Zoning Code, privately owned and operated transmission or gen-tie lines that are not subject to CPUC's sole jurisdiction are subject to the County's unclassified conditional use permit procedures (Fresno County 2011).

In summary, transmission projects subject to state regulatory authority would be subject to the sole jurisdiction of the CPUC, and would be exempt from local discretionary land use and permit authority. However, project proponents are required by the CPUC to consult with local government agencies regarding land use matters. It is anticipated that the project proponents would coordinate with the local County administrations regarding land use matters related to the planned gen-tie projects. In the event that the gen-tie lines are to be privately constructed, both Kings and Fresno Counties would require either discretionary project approval in the form of a Conditional Use Permit, or administrative review and approval before construction could proceed. Therefore, the transmission and substation projects would not conflict with agricultural zoning requirements, and the impact in this regard would be *less than significant*.

Mitigation Measures:

Westlands Solar Park. Implement MMs AG-1, AG-2, and AG-3. No additional mitigation is required.

WSP Gen-Tie Corridors. No mitigation is required.

Impact AG-3. Agricultural Land Use Conflicts

<u>Westlands Solar Park</u>. The WSP solar facilities would result in potential land use conflicts with nearby agricultural operations resulting from dust generation and potential introduction of invasive weed species. (*Less-than-Significant Impact*)

<u>WSP Gen-Tie Corridors</u>. Construction of the gen-tie projects could result in lost or damaged crops, and could temporarily impede agricultural operations or access to agricultural lands and facilities. (*Less-than-Significant Impact with Mitigation*)

This impact analysis, along with Impact AG-4 below, addresses significance criterion 'c' above.

Westlands Solar Park

The WSP plan area is largely surrounded by active agricultural operations. Non-agricultural land uses can have potentially adverse effects on existing agricultural operations; and conversely, agricultural operations can result in impacts to non-agricultural development, as discussed below.

Impacts of Solar Facilities on Agriculture

Typical urban land uses such as residential development can introduce impacts to agricultural operations resulting from trespassing, vandalism, theft of produce, air pollution, and noise from increased traffic. The potential for accidents between slow-moving farm vehicles and fast-moving cars and trucks can also increase. Proximity to urban uses can also result in restrictions on agricultural practices, such as the aerial application of seeds, fertilizers, and pesticides.

Solar generating facilities are far less sensitive than residential land uses to potential effects of neighboring agricultural operations. The operation of solar facilities involves a small number of permanent staff, who would be unlikely to trespass, vandalize, or steal crops. The very low intensity of solar operations also translates into very low traffic generation, along with negligible increases in noise or air pollution. The small increment of traffic generation would also minimize the potential for accidents between project vehicles and slow-moving farm equipment and vehicles which may occasionally travel public roadways.

Grading and construction for solar facility development would expose soils to wind erosion and increase the potential for dustfall on agricultural crops located downwind. Increased dustfall could inhibit photosynthesis and result in reduced crop yields. However, implementation of dust control measures during construction, as required for each WSP solar project under measures specified in Dust Control Permits issued by the SJVAPCD would reduce potential dust impacts to less-than-significant levels. (For a full discussion, see Section *3.3. Air Quality and Climate Change* under Impact AQ-1.)

Development of the solar facilities could also result in the introduction of invasive weed species to the area, which could interfere with nearby crops. However, the potential for invasive weed species would be minimized at each WSP solar project through the Agricultural Management Plan required for each solar project under Mitigation Measure AG-1, which requires revegetation with weed-free seed mix and weed free mulch. The introduction of weeds would be further minimized through implementation of the Weed Abatement Plan required under Article 11, Section 1112.B.2.e of the Kings County Development Code. These measures would reduce the potential impact of invasive weed species to less-than-significant levels.

In summary, the low intensity of solar facility operations would generally minimize the potential for impacts to adjacent agricultural operations. However, there would be potential for dust impacts during grading and construction, as well as the potential for introduction of invasive weed species to the area. As discussed, the implementation the required dust control and weed abatement measures would ensure that the impacts to adjacent agricultural operations would be *less than significant*.

Impacts of Existing Agricultural Operations on WSP Solar Projects

Agricultural impacts on non-agricultural uses typically include noise, dust, and pesticide drift, although the planned solar generating facilities would generally be less sensitive to such activities compared to

residential or other sensitive land uses. Most of the lands in the immediate WSP vicinity are in cultivation for row crops and tree crops. Plowing activities on the adjacent crop lands would generate dust which could be carried to the solar facilities and result in soiling of solar panels. Under prevailing winds, which blow from northwest to southeast in all but the winter months, the solar facilities could be subject to dustfall during plowing of fields adjacent to the north and northwest. However, the potential for dust generation would occur only occasionally when fields are plowed or under high wind conditions when bare soils are exposed. The WSP plan area would be subject to dustfall from plowing of fields to the south, southeast, and west only under still conditions or atypical wind conditions.

The progressive soiling of solar panels by windblown dust would result in incremental degradation of PV generating efficiency. The potential for panel soiling is taken into consideration in project planning and management of solar PV facilities, which includes regular panel washing as part of routine maintenance activities. The panel washing operations for solar facilities within the WSP are described in Chapter 2. *Project Description*, and would involve up to 4 panel washing cycles per year, or more if conditions warrant. The water demand and supply aspects of panel washing are discussed in Section 3.14. Utilities and Service Systems.

The crop lands and orchards in the project vicinity would receive pesticide applications, but these are unlikely to occur by aerial spraying. California law prohibits pesticide application in areas where there is a possibility of contamination of people or property that is not target for application (3 CCR § 6614). In addition, the California Department of Pesticide Regulation (CDPR) requires that aerial spraying be confined to the lands intended and does not allow spraying under meteorological conditions which may result in airborne dispersal agricultural chemicals to off-site locations. It is expected that growers who are adjacent to sensitive uses would use ground application methods, in compliance with State law.

Dairy operations and other concentrated animal feeding operations are common in Kings County. The nearest dairy operation is adjacent to the southern portion of the WSP plan area on Omaha Avenue, west of SR-41. This dairy operation is downwind from most of WSP plan area, which would minimize the potential odor and dust effects on nearby WSP solar facilities. Under still or atypical wind conditions, odor and dust effects could occur at the adjacent WSP solar facilities, but these conditions would have minimal adverse effects on solar operations.

By locating solar operations in the midst of an agricultural area, proponents of solar facilities must accept a certain degree of annoyance and inconvenience associated with nearby agricultural operations. This is clearly provided for in the County's "Right-to-Farm Ordinance," described in detail in Section 3.2.2. *Regulatory Context* above, which requires acknowledgement of the right of growers to conduct customary farming operations and practices without restriction.

In summary, the potential for agricultural operations to affect the WSP solar facilities would be limited to occasional dustfall due to plowing of adjacent fields, and possibly some pesticide drift due to spraying of nearby orchards. Since solar generating facilities are less sensitive to occasional dust, pesticide drift, noise, and odors than other land uses such as residential development, the potential for adverse effects to solar facilities is relatively low. The primary concern would be with windblown dust from nearby agricultural fields, which WSP solar facilities would address through regular panel washings as part of their routine operations and maintenance activities. The regular panel washing would minimize the potential reduction in solar generating efficiency resulting from panel soiling. In light of the above factors and considerations,

the potential impacts on WSP solar facilities resulting from nearby agricultural operations would be *less-than-significant*.

WSP Gen-Tie Corridors

The planned gen-tie corridors are aligned to run adjacent to existing transmission or transportation corridors. The northern gen-tie corridor would run parallel to the existing 230-kV Henrietta-Gates transmission line, and the southern gen-tie corridor would run adjacent to Nevada/Jayne Avenue. The intent of these alignments is to have transmission lines follow routes where agricultural lands have already been bisected by existing transmission or transportation corridors, in order to minimize disturbance of previously undisturbed farming operations.

Approximately 2 acres of cultivated farmlands would be permanently removed to make way for transmission monopoles. However, the tower sites would be small (about 0.02 acres each) and distributed over the 23-mile length of the transmission corridors. Therefore, the permanent impact due to lost agricultural acreage at the widely dispersed tower sites would be minor and would not have a significant adverse effect the overall viability of any farming operation. However, in areas where the transmission corridors would pass over tree tops of permanent nut and fruit crops, there is a potential that clearance requirements from conductors could result in removal of permanent tree crops in areas of the transmission easement where the conductor sag between towers is greatest.

Construction and maintenance of the gen-tie lines could temporarily impede agricultural operations or access to agricultural lands and facilities. Construction activities would include installation of towers, construction of temporary access roads, and conductor pulling and stringing. Since the gen-tie corridors pass through cultivated farmlands, the construction of transmission monopoles could result in lost crops depending on timing of construction. Construction activities and the presence of construction equipment could also temporarily interfere with agricultural operations by causing incidental damage to crops or soil, impeding access to certain farming and grazing areas, obstructing farm vehicles, or potentially disrupting irrigation and drainage systems.

Upon completion of the gen-tie lines, agricultural operations could continue within the transmission easements and around the towers, although minor adjustments to agricultural operations would likely be needed. Farming activities would require additional passes for tilling, planting, and harvesting to maneuver around the monopoles. Crop dusters would likely need to make additional passes around transmission lines and monopoles to achieve full coverage of application. However, these effects would be minimized by routing the gen-ties lines adjacent to existing transmission or roadway corridors, as planned. The overall impact of gen-tie line operation upon agricultural operations would be *less than significant*.

In summary, the gen-tie projects would potentially result in lost crops due to siting and design of monopoles and conductors. Agricultural operations would also be temporarily impaired by conflicts between schedules for transmission line construction and agricultural operations, and due to incidental damage to crops and agricultural facilities. These potential temporary and permanent affects upon agricultural operations represent *potentially significant impacts*. With implementation of Mitigation Measures AG-4 and AG-5 below, the impacts would be reduced to *less than significant*.

Mitigation Measures:

Westlands Solar Park. No mitigation is required.

<u>WSP Gen-Tie Corridors</u>. In order to reduce the temporary and permanent impacts of the gen-tie projects on agricultural operations to less-than-significant levels, the following mitigation measures shall be implemented in conjunction with the gen-tie projects:

- MM AG-4 <u>Mitigation for Permanent Impacts to Agricultural Operations</u>. The following measures shall be implemented to minimize permanent impacts to agricultural operations:
 - During the engineering design stage, transmission monopoles shall be planned to be placed at the edges of farm fields and adjacent to existing roadways and farm lanes, to the extent feasible.
 - During the engineering design stage, taller than typical transmission monopoles shall be planned where the gen-tie lines pass through areas of permanent tree crops, in order to provide required clearances with tree crops and thus avoid permanent removal of tree crops within the transmission easements.
- MM AG-5 <u>Mitigation for Temporary Impacts to Agricultural Operations</u>. The following measures shall be implemented to minimize and mitigate temporary impacts to agricultural operations during construction:
 - During the engineering design stage, temporary work areas, such as construction staging and materials storage areas, and stringing and pulling sites, shall be planned to be located on lands that are not under agricultural cultivation, to the extent feasible.
 - Prior to the commencement of construction/ground disturbing activities in a given area, the project proponent shall coordinate with the affected property owners in order to schedule construction activities so as to minimize disruption to agricultural operations.
 - During construction, activity by vehicles, equipment, and personnel shall be limited to designated work and staging areas, and designated temporary access roads, to the extent feasible.
 - Fences, gates, and other agricultural fixtures that are damaged during construction shall be repaired or replaced to restore them to their pre-construction condition, as soon as practicable after the damage occurs.
 - Damage to crops as a result of construction shall be compensated.

 Upon completion of construction in a given area, all temporary disturbance areas shall be restored to pre-construction condition. Within cultivated fields, the disturbed areas will be tilled and restored to a condition suitable for farming.

Impact AG-4. Conversion of Adjacent Farmland to Non-Agricultural Uses

<u>Westlands Solar Park</u>. The presence of WSP solar facilities adjacent to ongoing agricultural operations would not directly or indirectly result in the conversion of these adjacent farmlands to non-agricultural uses. (*Less-than-Significant Impact*)

<u>WSP Gen-Tie Corridors</u>. The presence of the gen-tie lines would not directly or indirectly result in the conversion of adjacent farmlands to non-agricultural uses. (*Less-than-Significant Impact*)

This impact analysis addresses significance criterion 'c' above.

Westlands Solar Park

As discussed under 'Impact AG-3' above, the WSP solar development would result in a less-than-significant impact in terms of creating land use conflicts between agricultural operations and the WSP solar facilities. Although the solar facilities may be subject to some dustfall from plowing of adjacent fields or pesticide drift from spraying of adjacent orchards, the potential for such effects to generate complaints from solar facility operators within WSP is likely much lower than it would be from residential development. Moreover, under the County's Right-to-Farm Ordinance the project proponents will be required to acknowledge, through disclosures recorded with their property title, that they accept the effects of normal agricultural operations. Therefore, it is unlikely that the conflicts would arise between the WSP solar facility operators and adjacent agricultural operations which would undermine the viability of the agricultural operations and thereby lead to their conversion to non-agricultural uses.

In addition, most of the adjacent farmland surrounding the WSP plan area is subject to Williamson Act contracts or Farmland Security Zone contracts, under which these lands are committed to agricultural purposes for at least another 10 or 20 years, respectively, unless these contracts are non-renewed or cancelled. These lands could also be proposed for solar PV generating projects without cancellation of Williamson Act or FSZ contracts, assuming such projects would conform to the County's Williamson Act principles of compatibility. If so, these solar projects would be required to provide for concomitant agricultural production during the life of the solar facilities and full reclamation of the sites to their pre-project condition upon decommissioning.

It is unlikely that WSP solar development would induce owners of nearby lands on non-contracted lands to convert their farmlands to solar use. Each WSP solar project will be a self-contained solar generating facility that would not include electrical infrastructure with excess capacity that could be used to support similar solar generating facilities on adjacent farmland. The two switching stations and gen-ties planned for WSP would be constructed only as needed to support incremental development of WSP solar projects over time. WSP solar development would not result in the construction of new roadways, beyond internal maintenance driveways, and thus would not provide new vehicular access to adjacent contracted land. Since WSP solar development would not include any excess infrastructure service capacity that could serve adjacent contracted land, it would not induce the owners of such lands to remove adjacent contracted lands from agricultural use by reason of excess infrastructure capacities.

Unlike urban development, the solar generating facility would not induce other development nearby, either for the purpose of providing support services or for taking advantage of services provided by the project. Solar generating facilities neither provide nor require urban services and therefore would not attract or induce other development nearby. Moreover, such urban development would not be permitted on adjacent or nearby lands under the applicable agricultural zoning, and thus the WSP solar development would not result in the conversion of adjacent farmland through urban growth inducement. (For further discussion, see Section *5.2. Growth-Inducing Effects of the Proposed Project.*)

In light of the above considerations, there is little or no potential that WSP solar development, in and of itself, would directly or indirectly result in the conversion of adjacent agricultural lands to non-agricultural uses, and therefore this impact is *less-than-significant*.

WSP Gen-Tie Corridors

As discussed under Impact AG-3, transmission lines are generally compatible with agricultural operations. Although minor adjustments to agricultural practices may be necessary in areas within and adjacent to transmission lines, the amount of agricultural land that is permanently removed from cultivation is very small and generally confined to the footprints of the transmission towers. Agricultural operations on land not directly traversed by gen-tie projects would not be subject to temporary or permanent affects that would impede or preclude continued agricultural production on those lands. Observations of existing transmission lines in the affected agricultural areas indicate that the lands within and adjacent to transmission facilities continue to be cultivated without any apparent conversion of adjacent lands to non-agricultural uses. Therefore, there is no evidence to suggest that the presence of the planned gen-tie lines, in and of themselves, would result in conversion of adjacent agricultural lands to non-agricultural uses.

The planned gen-tie lines will only provide transmission capacity to serve WSP solar development, with no transmission capacity remaining upon buildout of the Westlands Solar Park. As such, the WSP gen-tie lines would not provide transmission capacity that would facilitate additional solar development along the gen-tie route.

In summary, the WSP gen-tie lines would not directly or indirectly result in conversion of other agricultural lands in the vicinity to non-agricultural uses. Therefore, the impacts of the WSP gen-tie corridors with respect to potential conversion of adjacent agricultural lands would be *less than significant*.

Mitigation Measures:

Westlands Solar Park. No mitigation is required.

WSP Gen-Tie Corridors. No mitigation is required.

Cumulative Impacts

Impact AG-5. Cumulative Impacts to Agricultural Resources

<u>Westlands Solar Park</u>. The WSP solar development would not make a cumulatively considerable contribution to agricultural resource impacts, with mitigation; therefore, WSP solar development would not have a significant cumulative impact on agricultural resources, with mitigation. (*Less-than-Significant Cumulative Impact with Mitigation*)

<u>WSP Gen-Tie Corridors</u>. The gen-tie projects would not make a cumulatively considerable contribution to agricultural resource impacts, with mitigation; therefore, the gen-tie projects would not have a significant cumulative impact on agricultural resources, with mitigation. (*Less-than-Significant Cumulative Impact with Mitigation*)

Geographic Scope of Cumulative Impacts to Agricultural Resources

The cumulative loss of farmland is statewide in scope and impact. For purposes of this analysis, the geographic scope of the cumulative impact analysis for agricultural resources with respect to the Westlands Solar Park and the WSP Gen-Tie Corridors is Kings County and the southwestern portion of Fresno County.

Westlands Solar Park

Near-Term

Farmland Conversion

This discussion of near-term cumulative impacts considers the potential impacts of the project combined with the incremental effects of other approved, proposed and reasonably foreseeable projects in Kings County and southwestern Fresno in the near-term. The Kings County projects are listed in Table PD-9, and shown in Figure PD-9 in Chapter 2. Project Description. The projects in southwest Fresno County are listed in Table PD-10 and shown in Figure PD-10. It is noted that all but three of the projects listed in Tables PD-9 and PD-10 comprise solar PV generating facilities. Other projects that have been proposed and approved in Kings County and the proximate area of Fresno County over the past several years have consisted almost entirely of minor projects such as cell towers or adaptive reuse projects that involve minimal or no impacts. The three exceptions include the Quay Valley project in Kings County, and the Central Valley Power Connect transmission project in Kings and Fresno counties, as well as the anticipated Westside Transmission Project in Fresno County. The Quay Valley project is a large mixedused development on an approximately 7,500-acre site along Interstate-5 just north of the Kern County line. The Quay Valley project includes 25,000 dwelling units plus hotels, restaurants, a business park, a research park, a Hyperloop Research and Demonstration Center, and a 150 MW solar PV generating facility. The Central Valley Power Connect project involves construction of a 63-mile long 230-kV transmission line connecting the Gates Substation to the Gregg Substation located north of the City of Fresno. The anticipated Westside Transmission Project is expected to involve a 69-mile long 500-kV transmission line commencing at the Gates Substation and extending to the Dos Amigos Pumping Plant, and potentially continuing on to the Los Banos Substation. These projects are discussed further below.

Within Kings County, the majority of the pending, approved, and completed solar projects are located on lands mapped as Prime Farmlands or Farmland of Statewide Importance (i.e., "Farmland") under the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP). All of these projects are either subject to same conditions of approval as the WSP solar development with respect to maintaining agricultural activity as concomitant land use and site reclamation upon decommissioning, or are subject to conditions to mitigate for the loss of agricultural land with offsets in the form of restrictive covenants to be placed on other Farmland for the life of the solar project. Therefore, these other solar projects in Kings County would not result in permanent conversion of Farmland, either individually or collectively, and therefore would not result in a cumulatively significant impact in terms of Farmland conversion.

The Quay Valley site is entirely designated as Grazing Land on DOC's 2016 Important Farmland Map of Kings County. Under the Kings County Priority Agricultural Land Model, no portion of the Quay Valley site is designated for any type of Priority Agricultural Land (Kings County, 2010a). Therefore, it is not expected that the Quay Valley project would be subject any mitigation requirement for conversion of Farmland or Priority Agricultural Land.

The Central Valley Power Connect transmission project is in the early planning stages and alternative transmission routes had been under consideration until the project was placed on hold in late 2016. Based on the 63-mile length of the planned transmission line, it is roughly estimated that up to 32 acres of Farmland would be permanently converted at the tower locations, assuming lattice towers are selected. While the loss of this Farmland may be subject to mitigation in the form of conservation easements, the impact of the loss of this amount of Farmland would remain significant and unavoidable on a project basis.

The Westside Transmission Project is in the very early planning stages, and no preferred or alternative transmission routes have yet been formally identified. Based on the 69-mile length of the planned transmission line, it is roughly estimated that up to 35 acres of Farmland could be permanently converted at the tower locations, assuming lattice towers are selected. While the loss of this Farmland may be subject to mitigation in the form of conservation easements, the impact of the loss of this amount of Farmland would remain significant and unavoidable on a project basis.

In summary, even if there is no Farmland conversion on other lands in the study area in the near term, the conversion of Farmland at Central Valley Power Connect project and the Westside Transmission Project would result in a cumulatively significant impact with respect to Farmland conversion.

In order to evaluate whether a project would result in a cumulatively significant impact to agricultural resources, CEQA requires a determination of whether the project contribution to the significant cumulative impact would be "cumulatively considerable." If the project contribution is not cumulatively considerable, there is no significant cumulative impact associated with the project.

The WSP plan area includes agricultural lands that are either cultivated for row crops or used for grazing. Approximately 67 percent of lands within WSP are mapped as Prime Farmlands or Farmlands of Statewide Importance (i.e., "Farmland") under the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP). All of these lands are under Williamson Act or Farmland Security Zone contracts. As discussed under MM AG-1, the WSP solar projects planned on "Farmland" would be required to incorporate dry-land farming with sheep grazing as part of their operations in order

to maintain agricultural production on each SGF site during the life of solar generation activity. At the end of their productive lives, all WSP solar facilities would be decommissioned and reclaimed to return the sites to their pre-project conditions in accordance with MM AG-2 and MM AG-3. As such, none of the WSP solar projects would result in the permanent conversion of farmland to non-agricultural uses. Further, none of the WSP solar projects would otherwise result in the conversion of Farmland to non-agricultural use. As such, the collective contribution from the WSP solar projects to the cumulatively significant impacts to agricultural resources *would not be cumulatively considerable*. As such, the impact of WSP solar development in terms of conversion of Farmland to non-agricultural uses would be *cumulatively less than significant* in the near term.

Conflicts with Agricultural Zoning and Williamson Act

Almost all of the cumulative solar project sites, including the WSP plan area, are located in agricultural zoning districts or other zoning districts that permit solar generating facilities as a conditionally permitted use (as mentioned, the exception is the Quay Valley project). In Kings County, the cumulative projects on agriculturally zoned land would be required to satisfy the applicable County Development Code findings for conditional use permits, and lands under Williamson Act contract would be required to meet the compatibility findings, or initiate contract cancellation. The Quay Valley project is expected to be consistent with applicable zoning upon approval of amendments to the General Plan and Development Code that would permit that project to proceed. In Fresno County, the cumulative projects would also be consistent with applicable zoning. Therefore, none of the cumulative projects would conflict with applicable agricultural zoning. As such, there would be no cumulative impact in terms of land use plans, policies, and regulations, and the project would make *no contribution* to such a cumulative impact.

Most of the cumulative projects, including approximately 51 percent of the WSP plan area, are subject to either Land Conservation contracts or Farmland Security Zone contracts under the Williamson Act. Some of these projects would initiate contract cancellation proceedings, and other projects including the applicable WSP solar projects, would meet State and County principles of Williamson Act compatibility to enable solar generating facilities to occupy the contracted lands. The cumulative projects that elect to pursue the compatibility options would maintain sufficient on-site agricultural productivity in order to meet the State and County principles of compatibility under the Williamson Act, as a requirement of Conditional Use Permit approval by Kings County. Therefore, these projects are anticipated to maintain active Land Conservation or Farmland Security Zone contracts for the life of the solar projects without conflicting with the Williamson Act. In summary, none of the cumulative projects, including the WSP solar projects, would individually result in significant impacts in terms of conflicting with the Williamson Act. As such, the impact associated with WSP solar development in terms of conflicts with the Williamson Act would be *cumulatively less than significant*.

Potential Conflicts with Adjacent Agricultural Uses

Regarding potential conflicts with agriculture, the solar projects would be generally compatible with agricultural use and would not substantially impair the use of agricultural land, as discussed under Impact AG-3 above. The construction of the transmission lines may involve temporary impacts to agricultural operations in the immediate vicinity, but these impacts would be mitigated through implementation of measures such as those specified in MM AG-5 above, which would be implemented for both the WSP gentie projects and the CVPC transmission project. The Quay Valley project may involve potential conflicts with adjacent agricultural uses, but these are expected to be mitigated through conditions of approval by Kings

County. In summary, the cumulative projects, including the WSP solar development, are not anticipated to result in conflicts with adjacent agricultural uses, on an individual project basis or cumulatively. Therefore, the potential impacts to adjacent agricultural uses associated with WSP solar development would be *cumulatively less than significant*.

Potential Conversion of Adjacent Farmland to Non-Agricultural Use

As discussed under Impact AG-4 above, solar development requires very little supporting infrastructure that could support further development of adjacent lands with solar or other non-agricultural uses. However, the construction of the CVPC transmission project could include surplus capacity that could support additional solar development in western Fresno and Kings counties. However, as discussed throughout this section, solar projects in Fresno and Kings counties would be subject to strict requirements for site restoration upon decommissioning, such that permanent conversion of Farmland would be avoided. The Quay Valley project could include surplus service capacity to support additional urban development on adjacent lands. However, given the rigorous discretionary approval process required for such master planned projects in Kings County, it is unlikely that unplanned additional development outside the boundaries of the Quay Valley project would be permitted by the County. In summary, there is little or no potential for the cumulative projects, including the WSP solar development, to result in potential conversion of adjacent Farmland to non-agricultural uses, either on an individual project basis or cumulatively. Therefore, the potential impacts associated with WSP solar development, in terms of conversion of adjacent Farmland to non-agricultural uses, would be *cumulatively less than significant*.

Conclusion

In summary, the residual effects from the collective operations of the cumulative projects upon Farmland would be cumulatively significant in the near term; however, the incremental contribution from WSP solar development to the cumulatively significant impacts to Farmland in the near term *would not be cumulatively considerable with mitigation*. With respect to other agricultural resource impacts, the cumulative impacts would be *less than significant*. Therefore, the overall impact of WSP solar development upon agricultural resources in the near term would be *cumulatively less than significant* with mitigation.

Far Term

For purposes of the far-term cumulative analysis, the buildout of the designated urban land uses under the Kings County and Fresno County General Plans, as well as buildout under the General Plans of incorporated cities within Kings County and southwestern Fresno County, serves to define the nature and location of cumulative land uses anticipated under far-term conditions.

The General Plans provide for the orderly growth of the urbanized areas of Kings County and southwestern Fresno County over the far term. Given that most the land around these urbanized areas consists of "Farmland," this growth under the General Plans would result in the permanent conversion of agricultural land to urban uses. To minimize the impact to agricultural resources, the counties and the incorporated cities have implemented effective growth controls to prevent sprawl and avoid premature conversion of agricultural land, and have also instituted off-site mitigation requirements in the form of mitigation fees or permanent conservation easements. While this would constitute feasible mitigation at the project level under CEQA, the impact from the permanent conversion of farmland cannot be fully mitigated and would remain significant and unavoidable, on both a project and cumulative basis. It is expected that additional solar development projects, not currently proposed or foreseen, would be constructed over the far term. While most of these solar projects would likely be developed with concomitant agriculture production to meet Williamson Act compatibility principles, there is a potential that some of these solar projects would be developed on "Farmland" that is not under Williamson Act or FSZ contract and therefore may be mitigated through other means such as restrictive covenants (preferred in Kings County) or offsite conservation easements (outside of Kings County). Both of these mechanisms would ensure continued agricultural cultivation on other lands in the County that are of equivalent size and quality to the lands on the solar project site. Conservation easements are typically acquired in perpetuity, while the use of restrictive covenants allows for the termination of the covenants after the solar project site is reclaimed and returned to a condition suitable for agriculture. Since such compensatory mitigation would not provide full mitigation for agricultural conversion (including temporary conversion during the life of the solar project), any such projects would contribute to the significant cumulative impact to farmlands. Therefore, it is concluded that cumulative impacts to agricultural resources in the study area in the far term would be significant and unavoidable.

As discussed under "Near Term" above, the WSP solar development, as mitigated, would avoid conversion of "Farmland" both during the life of the solar facilities and upon decommissioning. Therefore, the contribution of WSP solar development to the cumulative impact would be *not cumulatively considerable* with mitigation, and as such the impact to Farmland resulting from WSP solar development in the far term would be *cumulatively less than significant with mitigation*.

Regarding other impacts to agricultural resources, as discussed under "Near-Term," such as conflicts with agricultural zoning, conflicts with adjacent agricultural operations, and potential conversion of adjacent Farmland, these potential impacts are expected to be less-than-significant for the same reasons discussed for near-term conditions above. Therefore, the potential impacts associated with WSP solar development with respect to these issues would be *cumulatively less than significant* in the far term.

In summary, potential impacts to agricultural resources associated with WSP solar development in the far term would be *cumulatively less than significant with mitigation*.

WSP Gen-Tie Corridors

Near-Term

This discussion of near-term cumulative impacts considers the potential impacts of the project combined with the incremental effects of other approved, proposed and reasonably foreseeable projects in the western parts of Kings and Fresno counties in the near-term. These cumulative projects are listed in Table PD-10 and shown in Figure PD-10 in Chapter *2. Project Description*.

Farmland Conversion

As discussed above for the Westlands Solar Park, most of the approved and pending projects in the study area consist of solar PV development, some of which are located on Farmland. As with other solar projects in the study area, it is expected that approval of these projects by Kings and Fresno County will be conditioned upon a requirement for site reclamation upon decommissioning of the solar facilities. Thus permanent loss of Farmland at these project sites would be avoided and the impact in terms of Farmland

conversion would be less than significant, on both an individual project basis and cumulatively. However, as discussed, it is likely that Farmland conversion impacts associated with the CVPC and Westside transmission projects would not be mitigated to less than significant levels, which would result in a cumulatively significant impact to Farmland in the study area.

With respect to the WSP Gen-Tie Corridors, almost all of the lands traversed by the gen-tie corridors are mapped as "Farmland" under the FMMP. As discussed under Impact AG-1, the gen-tie monopoles would collectively result in the removal of less than 2 acres of Farmland, which would be dispersed over 23 miles of gen-tie corridor. This would represent a very small amount of Farmland, and therefore the project impact to Farmland would be less than significant at the project level.

In order to evaluate whether the project would result in a cumulatively significant impact to agricultural resources, CEQA requires a determination of whether the project contribution to the significant cumulative impact would be "cumulatively considerable." If the project contribution is not cumulatively considerable, there is no significant cumulative impact associated with the project. For the WSP Gen-Tie Corridors, the conversion of less than 2 acres of Farmland over the entire project would be *not cumulatively considerable*. Therefore, the near-term impact associated with the WSP gen-tie projects, in terms of Farmland conversion, would be *cumulatively less than significant*.

Potential Conflicts with Adjacent Agricultural Uses

Regarding potential conflicts with agricultural operations, the WSP gen-tie projects would be generally compatible with agricultural use and would not substantially impair the use of agricultural land, as discussed under Impact AG-3 above. Impacts to agricultural operations would be minimized by routing the gen-tie lines adjacent to existing transmission lines or transportation corridors, as planned, and by implementation of MM AG-4, which requires the placement of transmission towers at the edges of cultivated fields where feasible, and avoidance of removal of tree crops beneath conductors, and the restoration of temporary disturbance sites to pre-construction conditions; and MM AG-5 which requires avoidance and mitigation of temporary construction impacts to agricultural operations. Cultivation would continue within the gen-tie corridors, so overall effects on agricultural operations would be minor. Therefore, impacts to agricultural operations resulting from the WSP gen-tie projects would be less than significant with mitigation. It is expected that the other cumulative transmission projects would be required to incorporate similar measures to minimize impacts to agricultural operations. Therefore, the impact associated with the WSP gen-tie projects, in terms of potential conflicts with adjacent agricultural uses, would be *cumulatively less than significant with mitigation* in the near term.

Conflicts with Agricultural Zoning and Williamson Act

In terms of agricultural zoning, electrical transmission lines and substations operated by public utilities are under the sole jurisdiction of the CPUC and/or federal regulatory agency, as applicable, and are exempt from local planning policy and zoning regulations. Privately owned and operated transmission lines and gen-ties are generally permitted uses in agricultural zones, subject to permitting by the affected County. Therefore, the transmission corridors would not conflict with the local agricultural zoning, and the impact would be less than significant. As discussed for the Westlands Solar Park, the cumulative impact from other approved and pending projects in the study area, in terms of conflicts with agricultural zoning would be less than significant, and this would also be the case in the context of the gen-tie projects. Therefore, the impact associated with the WSP gen-tie projects, in terms of conflicts with agricultural zoning, would be *cumulatively less than significant* in the near term.

With respect to lands under Williamson Act and FSZ contracts, transmission lines are considered to be compatible uses under state law. Therefore, the WSP gen-tie projects would not conflict with the Williamson Act, and the impact would be less than significant. As discussed for the Westlands Solar Park, the cumulative impact from other approved and pending projects in the study area, in terms of conflicts with the Williamson Act, would be less than significant, and this would also be the case in the context of the gen-tie projects. Therefore, the impact associated with the WSP gen-tie projects, in terms of conflicts with the Williamson Act, would be *cumulatively less than significant* in the near term.

Potential Conversion of Adjacent Farmland to Non-Agricultural Use

Regarding the potential to result in conversion of adjacent Farmland, there is little or no potential that the WSP gen-tie projects would directly or indirectly result in the conversion of adjacent agricultural lands to non-agricultural uses, as discussed under Impact AG-4. Therefore, the potential project-level impact would be less than significant. As discussed under "Westlands Solar Park," the cumulative impact from other approved and pending projects in the study area, in terms of potential to result in conversion of adjacent Farmland, would be less than significant, and this would also be the case for the gen-tie projects. Therefore, the impact associated with the WSP gen-tie projects, in terms of potential to result in conversion of adjacent Farmland, would be *cumulatively less than significant* in the near term.

<u>Conclusion</u>

In summary, the residual effects of the cumulative projects upon Farmland would be cumulatively significant in the near term; however, the incremental contribution from WSP gen-tie projects to the cumulatively significant impacts to Farmland in the near term *would not be cumulatively considerable*. With respect to other agricultural resource impacts, such as conflicts with agricultural zoning, and potential conversion of adjacent Farmland, the cumulative impacts would be *less than significant*. With respect to conflicts with adjacent agricultural operations, the cumulative impacts would be *less than significant with mitigation*. Therefore, the overall impact of WSP gen-tie projects upon agricultural resources in the near term would be *cumulatively less than significant with mitigation*.

Far Term

For purposes of the far-term cumulative analysis, the buildout of the designated urban land uses and transportation networks in Kings County and southwestern Fresno County, as well as buildout of incorporated cities within those areas, as set forth in the respective General Plans, serves to define the nature and location of cumulative land uses anticipated under far-term conditions. The development planned for these areas in the study area would result in cumulatively significant impacts to Farmland in the far term, given that such conversions could not be feasibly mitigated to less than significant levels, and therefore would remain cumulatively significant and unavoidable.

As discussed under "Near Term" above, the WSP gen-tie projects would result in a very small area of Farmland conversion (less than 2 acres over 23 miles), which would represent a less-than-significant impact

to Farmland at the project level. Similarly, the contribution of the WSP gen-tie projects to the cumulative impact would be *not cumulatively considerable*, and as such the impact to Farmland resulting from the WSP gen-tie projects in the far term would be *cumulatively less than significant*.

Regarding other impacts to agricultural resources, such as conflicts with agricultural zoning, and potential conversion of adjacent Farmland, these potential impacts would be *less-than-significant* for the same reasons discussed for near-term conditions above. Regarding conflicts with adjacent agricultural operations, the cumulative impacts would be *less than significant with mitigation*. Therefore, the potential impacts associated with the WSP gen-tie projects with respect to agricultural resources in the far term would be *less than significant* with mitigation.

Mitigation Measures:

<u>Westlands Solar Park</u>. Implement MMs AG-1, AG-2, and AG-3. No additional mitigation is required.

<u>WSP Gen-Tie Corridors</u>. Implement MMs AG-4, and AG-5. No additional mitigation is required.

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