# 4.3 Agriculture Resources

This section describes effects on agriculture resources resulting from construction and operation of the Project. The LWEP EIR addressed agriculture in the LWEP EIR Section 3.3, *Agricultural Resources*, and concluded that impacts to agricultural resources would be adverse but not significant. The following discussion identifies any changes to the existing agricultural resources in the Project area since 2008, and provides an update to applicable policies, potential impacts, and recommended mitigation measures.

# 4.3.1 Environmental Setting

**Agricultural Preserve Contracts.** The primary wind site extends over approximately 2,971 acres, all of which is zoned for agricultural use (AG-II) and currently under Williamson Act agricultural preserve contracts. Table 4.3-1 lists the Agricultural Preserve Numbers and their corresponding Assessor's Parcel Numbers that would be utilized for Project construction or operation.

Agricultural Preserve Number	Assessor's Parcel Number
71AP077	083-080-004
73AP026	083-090-001
73AP026	083-090-002
69AP039	083-090-003
73AP027	083-090-004
78AP019	083-100-004
78AP004	083-100-007
73AP029	083-100-008
73AP029	083-250-011
73AP029	083-250-016
73AP029	083-250-019
01AP006	083-110-002

 Table 4.3-1. Agricultural Preserves Utilized for Project Components

**Important Farmland.** Project activities would occur on land designated by the California Department of Conservation (DOC) as Grazing Land. Since the LWEP EIR was released in 2008, the DOC has revised the Important Farmland maps illustrating the location and acreage of farmland relative to the Project. The following Important Farmland is within the Project area (DOC, 2019):

- **Prime Farmland.** This 6.6-acre property is located west of San Miguelito Road, approximately 800 feet from the transmission line route as it turns east towards the POI. None of the proposed Project activities would occur within this Prime Farmland.
- Unique Farmland. This 0.8-acre property is contiguous with the Prime Farmland. It is also located west of San Miguelito Road, approximately 760 feet from the transmission line route as it turns east towards the POI. None of the proposed Project activities would occur within this Unique Farmland.
- Farmland of Local Importance. The nearest Farmland of Local Importance is a 10.5-acre property located west of San Miguelito Road, approximately 710 feet from the transmission line as it parallels San Miguelito Road. This farmland is located west of San Miguelito Road, while the transmission line route is proposed east of the road. No Project activities would occur

within this farmland. The second property containing Farmland of Local Importance is a 45.9acre property located along the terminus of San Miguelito Road, approximately 0.4 mile northeast of the Project's western string and 0.4 mile southwest of the northern string. The proposed access roads for Project construction and maintenance would not utilize the portion of San Miguelito Road that bisects this farmland. No project activities would occur within this farmland.

**Cattle Grazing and Active Agriculture.** The Project is surrounded by rural land that is primarily used for cattle grazing. Within the primary wind site, there is a scattering of fields that are developed for dryland farming along the Project's northern string. Approximately five acres of active agriculture would be permanently disturbed as a result of the placement of WTGs along that string (Dudek 2019). None of the proposed WTG sites have been designated by the DOC as Important Farmland.

# 4.3.2 Regulatory Setting

No applicable federal regulations were identified in the LWEP EIR.

#### 4.3.2.1 State

The LWEP EIR identified one applicable State regulation: the California Land Conservation Act of 1965. There have been no relevant changes to this regulation since 2008. Please refer to the LWEP for a description of this regulation.

### 4.3.2.2 Local

The following local planning documents were identified in the LWEP EIR, and their description remains relevant to the SWEP. Please refer to the LWEP for a discussion of these plans, and to Section 4.13, *Land Use and Planning*, for an analysis of policy consistency:

- Santa Barbara County Comprehensive Plan
- Santa Barbara County Land Use and Development Code
- Uniform Rules for Agricultural Preserves and Farmland Security Zones

# 4.3.3 Significance Thresholds

Since the release of the LWEP EIR, the County has updated its environmental thresholds and guidelines, which are reflected in the revised agricultural thresholds below.

The Project would have a significant impact to agriculture resources if it would:

- Result in the conversion of prime agricultural land to non-agricultural use, impairment of agricultural land productivity (whether prime or non-prime), or conflict with agricultural preserve programs.
- Result in any effect [potentially significant adverse effect] upon any unique or other farmland of State or Local Importance.

### 4.3.4 Environmental Impacts and Mitigation Measures

Table 4.3-2 below lists the agriculture resources impact identified in Section 3.3 of the LWEP EIR. This same impact is addressed in this section for the SWEP. The right-hand column of the table below

indicates whether the SWEP impact has been modified for the LWEP. No mitigation measures specific to agricultural resources were recommended in the LWEP.

Impact No.	LWEP Impact Statements	LWEP Mitigation Measures	SWEP Changes
AG-1	Important Farmland/Williamson Act Contract Lands. Development of the LWEF and power line installation would result in the temporary and permanent disturbance of farmland and provide financial support to property owners.	None identified.	Modified impact statement. Updated impact discussion.

Table 4.3-2. LWEP Impacts and Mitigation Measures – Agriculture Resources

During the scoping period for this SEIR, a comment was submitted requesting that the SEIR examine the effects of shadow flicker on cattle. Shadow flicker is defined as the modulation of light levels resulting from the periodic passage of a rotating wind turbine blade between the sun and a viewer (DNV GL, 2017). The effect of shadow flicker is most noticeable inside buildings, where the flicker appears through a window opening. The likelihood and duration of the effect depends on several variables that include: orientation of the building relative to the turbine, wind direction, distance from turbine, turbine height and rotor diameter, time of year and day, weather conditions, vegetation and obstacles that mask shadows, and operational status of the turbines (DNV GL 2017).

There is limited research on the adverse effects of shadow flicker on residential receptors and very little research on potential effects to livestock. According to *Veterinary Medicine: A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs, and Goats,* no adverse health effects to livestock have been identified from exposure to wind farms (Constable et al. 2017). Given the lack of evidence that shadow flicker could have a detrimental effect on livestock, this topic was not discussed in further detail in the SWEP impact analysis.

The agricultural impacts of the proposed SWEP as determined by the significance thresholds (identified in Section 4.3.3) are discussed below.

# AG-1 Important Farmland/Williamson Act Contract Lands. Development of the SWEP and power line installation could result in the temporary and permanent disturbance of.

The LWEP concluded that impacts to Important Farmland/Williamson Act Contract Lands would be less than significant (Class III). The type and severity of impacts under the SWEP would be comparable to those discussed for the LWEP. Under the LWEP approximately 40 acres of designated Grazing Land would have been permanently disturbed, while under the SWEP approximately 22 acres of designated Grazing Land would be permanently disturbed. Of these 22 acres of disturbance, approximately five acres of an actively farmed area would be disturbed along the northern string. The remaining acreage of permanent disturbance would occur on lands that are used for grazing and are not actively farmed. All impacts would occur to designated Grazing Land, and similar to the LWEP, there would be no impact to Important Farmland (i.e., Prime or Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance). Furthermore, the Project would not require an extension of service, nor would it improve roads to a degree that would threaten agriculture. Project-related impacts to agricultural lands are limited to the onsite disturbance that would occur from constructing the WTGs,

substation, and supporting components. None of the activities associated with Project construction and operation would disturb adjoining agricultural lands outside of the SWEP site, or in any way affect agricultural operations to adjoining lands. See Section 6.4, *Growth-Inducing Impacts*, for a discussion of growth-related effects associated with the Project.

The Applicant has designed the SWEP to minimize adverse impacts to agriculture. First, the Applicant has entered into long-term leases with all affected property owners, which will provide financial compensation for the use of their land. Second, the Applicant would avoid siting Project infrastructure within Important Farmland. Third, the Applicant would minimize disruptions to grazing by installing temporary gates/fences that would prevent cattle from entering active construction in a particular area (County of Santa Barbara, 2018a).

Given the Applicant's commitments to compensate property owners and to minimize disruptions to grazing, the Project would not significantly impair agricultural productivity. No temporary or permanent disturbance would occur to Important Farmland. Under the SWEP, the disturbance to grazing activities would remain an adverse but less-than-significant impact (Class III).

# 4.3.5 Cumulative Effects

### **Geographic Extent/Context**

The geographic context for agriculture considers the extent to which the Project's adverse effects to agricultural land productivity or a preserve program would combine with the impacts from other projects to create an effect that is cumulatively considerable. The geographic extent of cumulative agriculture impacts includes designated agricultural land within the County's Lompoc planning area. The LWEP identified less-than-significant cumulative impacts to agricultural resources given that grazing would be able to continue during and after construction, and the permanent loss of Grazing Land would not significantly impair agricultural productivity. SWEP Table 3-1 identifies the most recent list of cumulative projects applicable to this SEIR.

### **Cumulative Effects**

**Important Farmland/Williamson Act Contract Lands.** Cumulative impacts associated with permanent conversion or long-term conflicts with agriculture would occur from multiple projects that develop Farmland for non-agricultural uses. Per the DOC's FMMP, the following projects identified in Section 3.3, Table 3-1, would be located on Important Farmland: No. 16 (Sepulveda Building Materials Mining Rev) located on Prime Farmland and Unique Farmland; No. 20 (Hilt Winery) located on Unique Farmland; and No. 114 (Annex 76 Bailey Ave) located on Prime Farmland and Unique Farmland (DOC, 2019). Project numbers 16 and 20 would also be located on designated Williamson Act lands (DOC, 2015). Although the SWEP would introduce a non-agricultural use within an agricultural region, the SWEP would not impact Important Farmland. Furthermore, the SWEP is required to reclaim all disturbed areas following decommissioning, which would allow affected properties to maintain their agricultural uses at the end of the Project's operational life. The Applicant's commitments to restore areas of temporary disturbance per a County-approved restoration and revegetation plan would avoid any substantial impacts from the SWEP. Consequently, the SWEP's contribution to a cumulative impact would not be significant.

# 4.3.6 Residual Impacts

Residual impacts to agriculture resources would be less than significant.

### 4.3.7 Impact and Mitigation Summary

Table 4.3-3 below provides a summary of the SWEP's impact to agriculture resources. No mitigation measures are required to reduce impacts on this resource.

Table 4.3-3. SWEP Impact and Mitigation Summary – Agriculture Resources

Impact No.	Impact Statement	Mitigation Measures	Significance Conclusion
AG-1	Important Farmland/Williamson Act Contract Lands. Development of the SWEP and power line installation could result in the temporary and permanent disturbance of farmland.	None required.	Class III

Class I. Significant unavoidable adverse impact.

**Class II.** Significant environmental impacts that can be feasibly mitigated or avoided.

**Class III.** Adverse impacts found not to be significant.

**Class IV.** Impacts beneficial to the environment.

### 4.3.8 References

- Constable, P.D., Hinchcliff, K.W., Done, S.H., and W. Grünberg. Veterinary Medicine: A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs, and Goats. Edition 11. Volume 1. Elsevier Ltd. 2017.
- County of Santa Barbara. 2018a. Conditional Use Permit Application for Strauss Wind Energy Project. Tab E: Agricultural Activities Supplement. Revised. September 14.
- \_\_\_\_\_. 2018b. Santa Barbara County Land Use and Development Code. Published December 2011, Updated September 2018.
- \_\_\_\_\_. 2018c. Agricultural Preserve Program. [online]:

https://countyofsb.org/agcomm/agpreserve.sbc. Accessed October 4, 2018.

\_\_\_\_\_2010. Santa Barbara County Comprehensive Plan, Conservation Element. Adopted 1979, Amended August 2010.

DNV GL. 2017. Bitter Root Wind Project Shadow Flicker Report. Flying Cow Wind, LLC. October.

- DOC (California Department of Conservation). 2019. California Important Farmland Finder. January. [online]: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed January 22.
- \_\_\_\_\_. 2015. Santa Barbara County Williamson Act FY 2015/2016. [online]: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Santa\_Barbara\_15\_16\_WA.pdf. Accessed October 11, 2018.

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