NOTICE OF PREPARATION

To: Interested Persons

From: County of Merced
Department of Community and Economic Development
2222 'M' Street, Merced, CA 95340
(209) 385-7654

Contact: Cameron Christie, Planner I

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Borba Dairy Farms Expansion project (Conditional Use Permit No. CUP20-014)

Merced County is the Lead Agency pursuant to the California Environmental Quality Act (CEQA) for the proposed Borba Dairy Farms Expansion project. Merced County will prepare an Environmental Impact Report (EIR) for the proposed dairy expansion project as described in the attached Initial Study. We need to know the views of interested persons, agencies, and organizations as to the scope and content of the environmental information to be included in the EIR. Agencies should comment only on the environmental resources that are within the agency's statutory responsibilities in connection with the proposed project.

The description, location, and the probable environmental effects of the proposed dairy expansion project are contained in the attached materials. A copy of the Initial Study and all project related documents can be obtained at the Community and Economic Development Department, 2222 'M' Street, Merced, CA 95340. This information is also available for download from the Merced County Planning Department website at:

http://www.co.merced.ca.us/index.aspx?nid=414

Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but **not later than 30 days** after receipt of this notice.

Please send your response to Cameron Christie, Planner I, at the Merced County address shown above. If an organization or agency, please include the name of a contact person so that we have the ability to contact you further during the EIR preparation process.

Project Title: Borba Dairy Farms Expansion

Project Location: Hilmar (*nearest city*) Merced (*County*)

Project Applicant: Borba Dairy Farms
5297 Kelley Road
Hilmar, CA 95324

Date: 05/17/2022 **Signature:** _____
Cameron Christie, Planner I

cc: State Clearinghouse

PROJECT DESCRIPTION / LOCATION

The Borba Dairy Farms is located on 46± acres of an existing farm totaling approximately 742 acres in unincorporated Merced County. The dairy project site is located on the west side of Kelley Road and south of Turner Road in the Hilmar area of the County. The project cropland application area consists of 525± acres located on portions of four parcels.

Conditional Use Permit CUP20-014 proposes to modify and expand the existing dairy to house 2,000 milk cows, 350 dry cows, and 2,100 support stock. Considering the existing animals as the dairy facility, the proposed expansion would represent an increase of 2,150 animals from existing numbers. The proposed project would include construction of supporting buildings and features at the dairy facility, including four new freestall barns, a new milking parlor and replacement dairy well, two new wastewater storage ponds, and an agricultural storage barn. With construction of the proposed facilities, an existing shade barn, shop, hospital milking parlor, and freestall barn would be removed. Cropped acreage associated with the expanded dairy operations would include approximately 887 acres, including the addition of 404 acres within fields 32 through 38. Construction of the proposed facilities would result in the conversion of approximately 24.2 acres of cropland. Crops grown on site would continue to be used for dairy feed crops and supplement imported grain and hay.

POTENTIAL AREAS OF ENVIRONMENTAL IMPACT

An initial evaluation of the proposed Borba Dairy Farms Expansion project indicates that the project has the potential to result in significant adverse effects on the environment for the following issue areas:

- Air Quality and Odors
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Greenhouse Gas Emissions and Energy Efficiency
- Hydrology and Water Quality
- Land Use Compatibility
- Nuisance Insects

The Environmental Impact Report will evaluate the impacts associated with these issue areas. In addition to the above, the Borba Dairy Farms Expansion project EIR will also include an analysis of project alternatives and cumulative effects.

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INITIAL STUDY AND ENVIRONMENTAL EVALUATION

Project Title:	Borba Dairy Farms Expansion Conditional Use Permit No. CUP20-014
Project Location:	5297 Kelley Road Hilmar, CA 95324
Lead Agency Name and Address:	Merced County Community and Economic Development Department 2222 'M' Street Merced, CA 95340
Contact Person and Phone Number:	Cameron Christie, Planner I Phone: (209) 385-7654
General Plan Designation:	Agricultural (Merced County General Plan)
Zoning:	A-1, General Agricultural (Merced County Zoning)

1. DESCRIPTION OF PROJECT

The project under evaluation in this Initial Study (IS) is the construction and operation of the expansion of an existing dairy facility located in rural Merced County southwest of the community of Hilmar. This Initial Study focuses on whether the proposed project may cause significant effects on the environment. In particular, consistent with Section 21083.3 of the California Public Resources Code, this Initial Study is intended to assess any effects on the environment, which are peculiar to the proposed project or to the parcel on which the project would be located. The Initial Study is also intended to assess whether any environmental effects of the project are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or by other means [Section 15152(d)(2) of the Guidelines for the California Environmental Quality Act (CEQA)]. If such revisions, conditions or other means are identified, they will be imposed as mitigation measures.

This initial study relies upon CEQA Guidelines Sections 15064 – 15064.7 in its determination of the significance of environmental effects. According to Section 15064(f), the finding as to whether a project may have one or more significant effects shall be based on substantial evidence in the record, and "[i]f the lead agency determines there is substantial evidence in the record that the project may have a significant effect on the environment, the lead agency shall prepare an EIR".

LOCATION

The active dairy facilities of the Borba Dairy Farms are located on 46± acres of an existing farm totaling approximately 742± acres in unincorporated Merced County. The dairy project site is located on the west side of Kelley Road and south of Turner Road in the Hilmar area of the County. The project's location is within the central California region (see Figures 1 and 2). The project cropland application area consists of 525± acres located on portions of four parcels, identified as Merced County Assessor's Parcel Number (APN) 045-080-003, 045-070-001, 045-060-009, and 045-080-040 (see Table 1 and Figure 3 for Merced County APN). The project site is located in Section 35, Township 6 South, Range 9 East, Mount Diablo Base and Meridian; 37°21'57.08"N, 120°57'26.98"W.

With the addition of surrounding farmland encompassing 10 additional parcels (included on Figure 3), there would be approximately 887± acres of cropland available for wastewater and manure application with the proposed dairy expansion.

EXISTING CONDITIONS

The existing dairy facilities include approximately 546,475 square feet of structures that are located on a ±46-acre portions of an existing farm totaling 742 acres. Existing facilities include the following (see Figure 4):

- freestall barns and shades
- commodity sheds
- hay barn
- manure drying and stacking area
- manure separator
- office
- open corrals
- milking parlor
- feed storage area
- 3 wastewater retention ponds
- shop

Approximately 525± acres of the dairy project parcels are currently used for the production of crops and the application of manure process water and/or solid manure[1] (see Table 1 and Figure 5). The remaining project acres consist of field roads and ancillary farm uses.

As established at the time of the Notice of Preparation (August 2021), there are approximately 2,000 milk cows and 350 dry cows with 2,100 support stock, totaling 4,450 animals at the dairy. The predominant breed of cows housed at the dairy is Holstein.

[1] While the details of cropland parcels may vary throughout operations, the disposal of wastewater and solid manure and the acreage necessary to properly dispose of manure liquids and solids would be accounted for in an updated project Nutrient Management Plan (NMP).

Table 1 Borba Dairy Farms: Existing Project Parcels, Acreage, and Use						
APN*	**Field**	**Gross Acreage**	**Cropped Acreage****	**Use**	**Nutrients Applied**	**Irrigation Source*****
045-080-003	1	88	7	Active dairy facilities, residence, cropland: corn silage/oat silage	WW	River pump
	2		53			
045-070-001	3	284	52	Active dairy facilities, cropland: corn silage/oat silage	WW	River pump
	4		78			
	5		80			
045-060-009	6	185	30	Cropland: corn silage/oat silage	WW	River pump
	7		55			
045-080-040	8	185	90	Cropland: corn silage/oat silage	WW	60 HP Pump
	9		55			
	10		5			
	11		20			
Total		**742**	**525**			

Notes: APN = Assessor's Parcel Number. WW = wastewater. DM = Dry Manure. HP = horsepower

* APNs listed in the table may differ from the Nutrient Management Plan (NMP) as they have been updated to reflect modified APN numbers according to Merced County records.

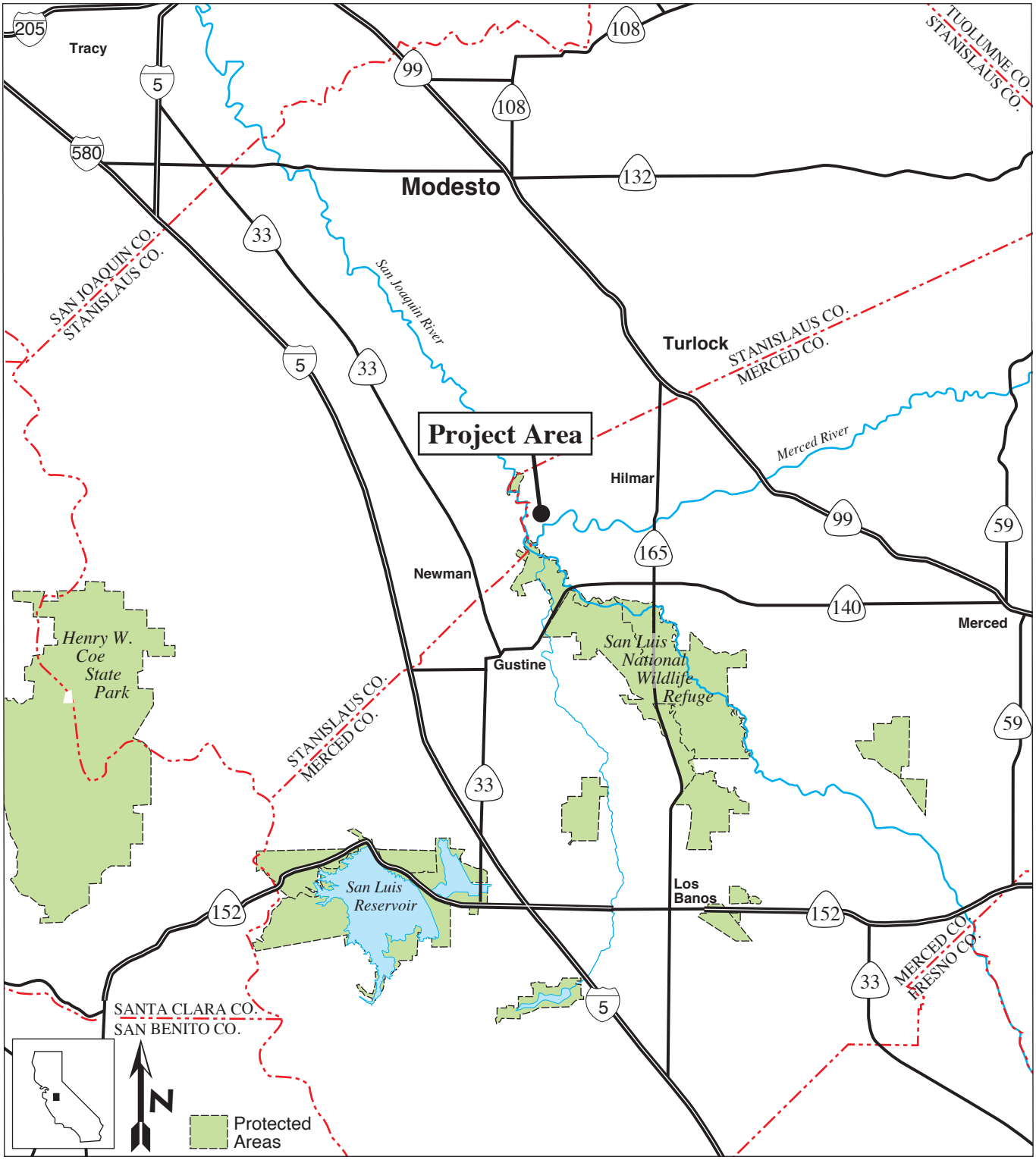
** Approximate acreage. Cropped acreage is based on the Existing Conditions NMP dated 09/15/2014. Nutrients may not be applied to the gross acreage of the parcel listed, but only the cropped acreage listed.

*** The existing NMP cited irrigation sources include a groundwater irrigation well (60 HP Pump) and a surface water River Pump which draws from the San Joaquin River. In addition, the NMP materials indicate only liquid manure is applied to cropped fields, but both liquid and/or solid manure can be applied at the dairy operator's discretion as long as nutrient planning targets are met.

Source: Borba Dairy Farms Existing Conditions Nutrient Management Plan (09/15/2014). Merced County GIS May 2021.

The existing dairy facility consists of flush and scrape systems that are used to collect and process wastewater and solid manure. Animal wastes from animal barns and other concrete-surfaced areas are flushed with recycled water to an on-site waste management system that consists of one solid settling basin and two wastewater storage ponds. All ponds are earthen-lined. The area of active dairy facilities has been graded to direct corral runoff to the existing waste management system. Stormwater runoff from impervious surfaces and roofed areas is routed to the wastewater pond, except for stormwater from several barns, which are routed to the Merced River. Recycled water is used to clean the milk parlor floor and is the source of sprinkler pen water.

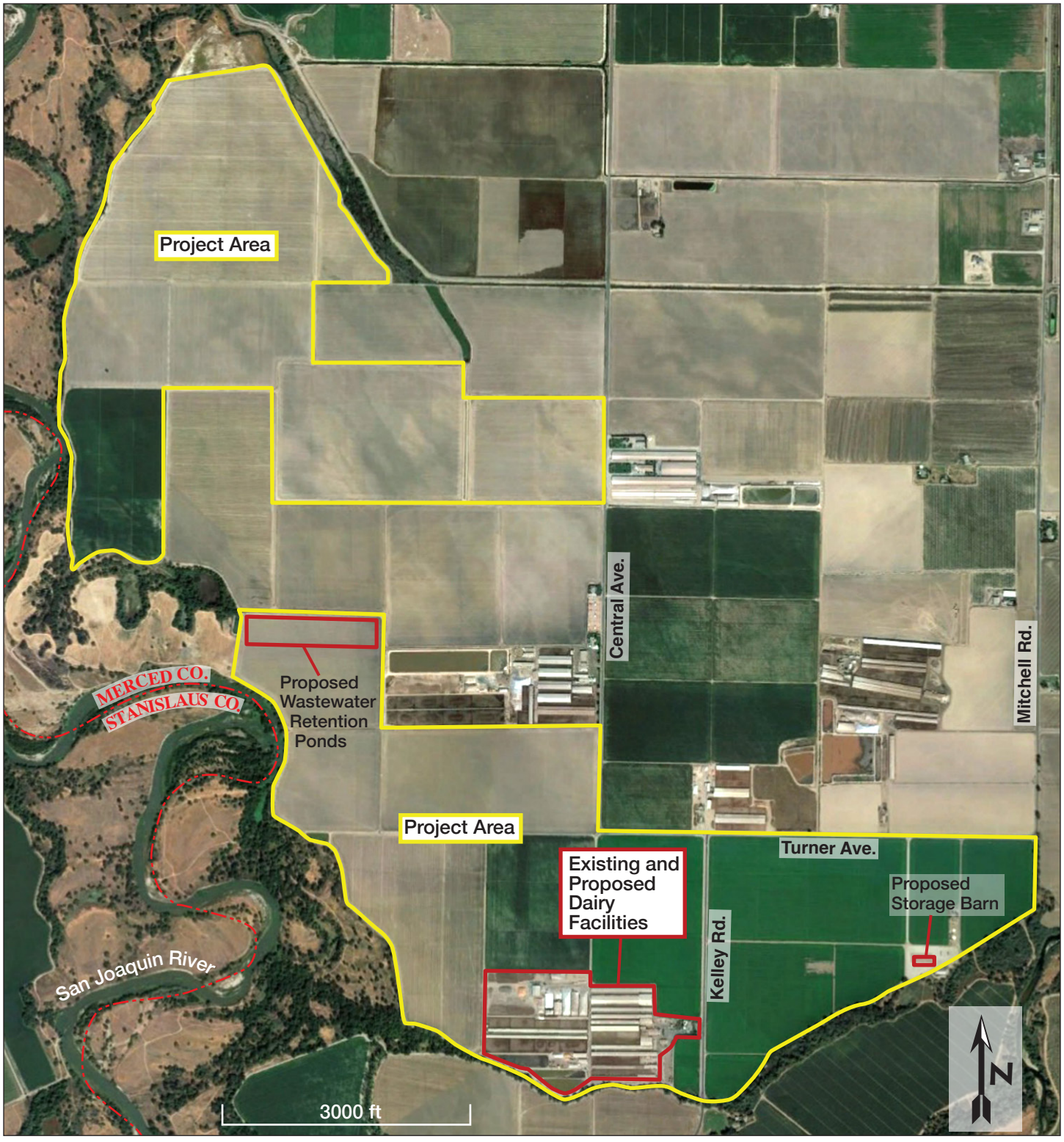
Dry manure is scraped from corrals monthly. Solid manure is currently composted onsite and removed weekly. Some of the solid manure is used as bedding (consisting of dry manure and almond shells), applied on the project site, or hauled off site to fields in the project vicinity. Manure solids are separated from liquids with 40 percent solids separation efficiency using a mechanical manure separation system combined with a settling basin. As reflected in the NMP, approximately 15,000 tons of solid manure and separated solids (or approximately 330,000 pounds of nitrogen) (approximately 19 percent of the dry manure generated at the dairy) is exported and applied to off-site fields not owned by the dairy operator.



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Planning Partners, 2021

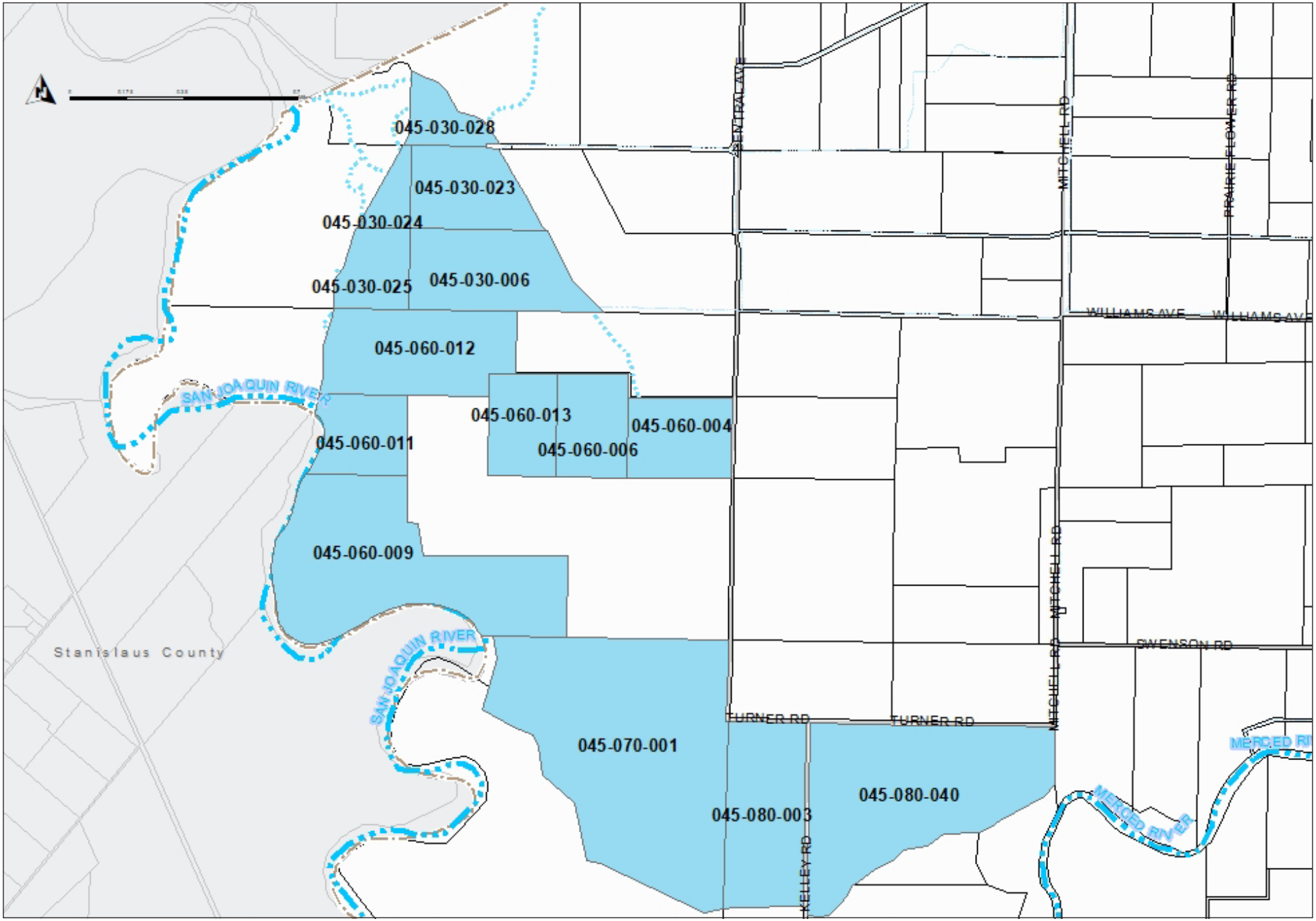
Figure 1
Regional Location



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Planning Partners, 2021

Figure 2
Project Vicinity

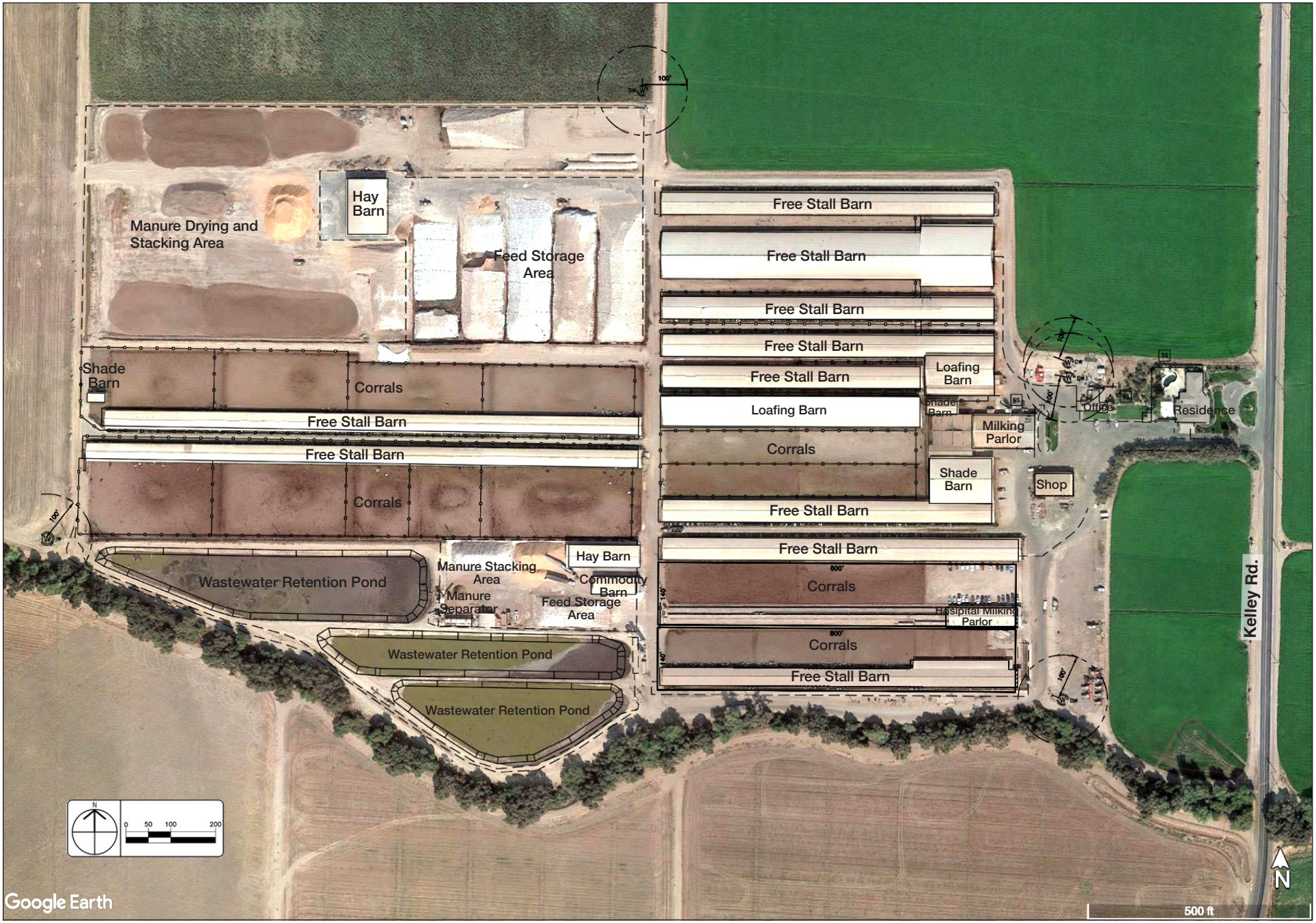


Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Merced County GIS 2021

Figure 3

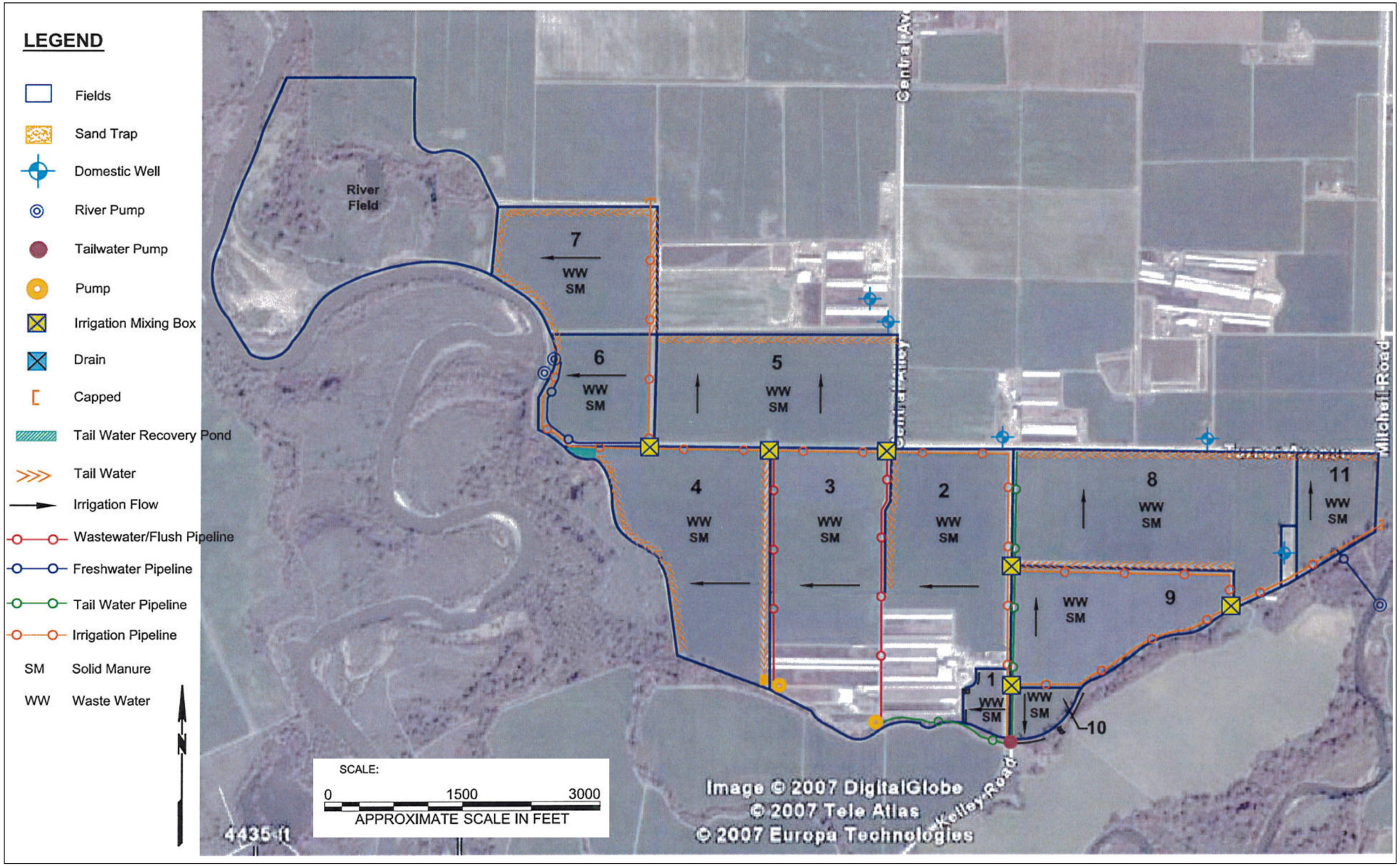
Project Site Merced County Assessor Parcel Numbers



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Sousa Engineering, 2020; Planning Partners, 2021

Figure 4
Existing Facilities



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: FR Ag Services, Inc., 2014

Figure 5

Existing Dairy Field Layout

The dairy facility uses both surface water and groundwater resources for farm operations. Domestic water to the site and dairy barns is provided by four on-site water wells. Irrigation water is supplied by surface water sources from Turlock Irrigation District (TID) canals and an onsite River Pump, in addition to groundwater from four irrigation wells. Wastewater is mixed with irrigation water and applied to cropland. Receiving fields are graded to guide excess applied irrigation water to an existing tailwater return and/or retention system. Collected tailwater is either returned to top of the field, returned to the retention pond, or retained in the tailwater pond. Field application of wastewater is via pipeline.

Definition of the Project Site – For the purposes of this Initial Study, the "project site" refers to the area of active dairy facilities. The larger project also includes cropland associated with the dairy farm. Throughout this document, "project area" refers to all parcels that are part of the project, including the active dairy facilities and associated cropland.

The Borba Dairy is a member of the Central Valley Dairy Representative Monitoring Program (CVDRMP). The CVDRMP has established a regional groundwater monitoring plan for member dairies in order to monitor groundwater quality and evaluate impacts from management practices.

Some of the crops grown on site are used for dairy feed crops and supplement imported grain and hay. Crops include corn and oat silage. Feed is stored in silage piles and in an on-site commodity barn.

The Borba Dairy Farms uses a weekly pest control service. In the winter, in addition to the regular pest control, gnats that target fly larvae are released at the dairy site as a biological control. There is a permitted agricultural gasoline dispensing operation with an aboveground, 500-gallon storage tank and fueling point on site. There is one permitted emergency diesel generator on site. Hazardous materials used in dairy operations are stored in the milking parlor, the shop, and at the fuel storage area near the existing wastewater ponds. A Hazardous Materials Business Plan has been filed with Merced Division of Environmental Health (DEH) and was accepted on December 8, 2020.

There is one residence located at the Borba Dairy Farms facility, occupied by an owner. There is another owner-occupied residence on Field 8. There is no employee housing on the dairy site or associated land application area parcels. Domestic water is delivered to the site by four on-site water wells, including two in the dairy production area, one north of the feed storage area, and one at the southeast area of the site. Sewer service is provided by existing on-site septic systems.

Operations at the dairy are 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. The herd is milked two times per day and milk is picked up and trucked off-site daily. Activity on the site peaks in the spring and the fall when feed crops from land application areas are being harvested along with daily dairy production operations. The dairy currently employs a staff of approximately 20 workers, with as many as fourteen (14) employees on site at one time.

Night lighting at the facility includes building-mounted lighting on animal housing structures and the milking parlor. Pole mounted yard lights also exist at some locations. There is a row of mature trees along the southern side of the dairy production area along an existing ditch.

Currently, the site is served by heavy trucks (milk tankers, commodity deliveries) and other vehicles. Existing daily trips by all classes of vehicles are estimated at 62.0 average daily trips (ADT), with approximately 17.7 heavy truck trips. All dairy-related trips currently access the site via Kelley Road.

State Route (SR) 165 to the east, SR 33 to the west, and SR 140 to the south provide regional access to the site. The dairy provides on-site parking areas for employees and suppliers/vendors. The dairy operation does not serve retail customers.

The project site is located within Flood Zone A, which is defined as an area subject to inundation by the 100-year storm, or 1-percent chance of occurring in any given year, but for which a Base Flood Elevation has not been established.

SURROUNDING LAND USES AND SETTING

There are offsite single-family residences associated with neighboring agricultural operations surrounding the project site. There is one offsite residence located within the windshed of the dairy (defined as an area of 1,320 feet upwind to 2,640 downwind of the periphery of the animal facility) (see Figure 6). Table 2 lists the immediate surrounding land uses and corresponding General Plan and zoning designations to the Borba Dairy active animal confinement facilities.

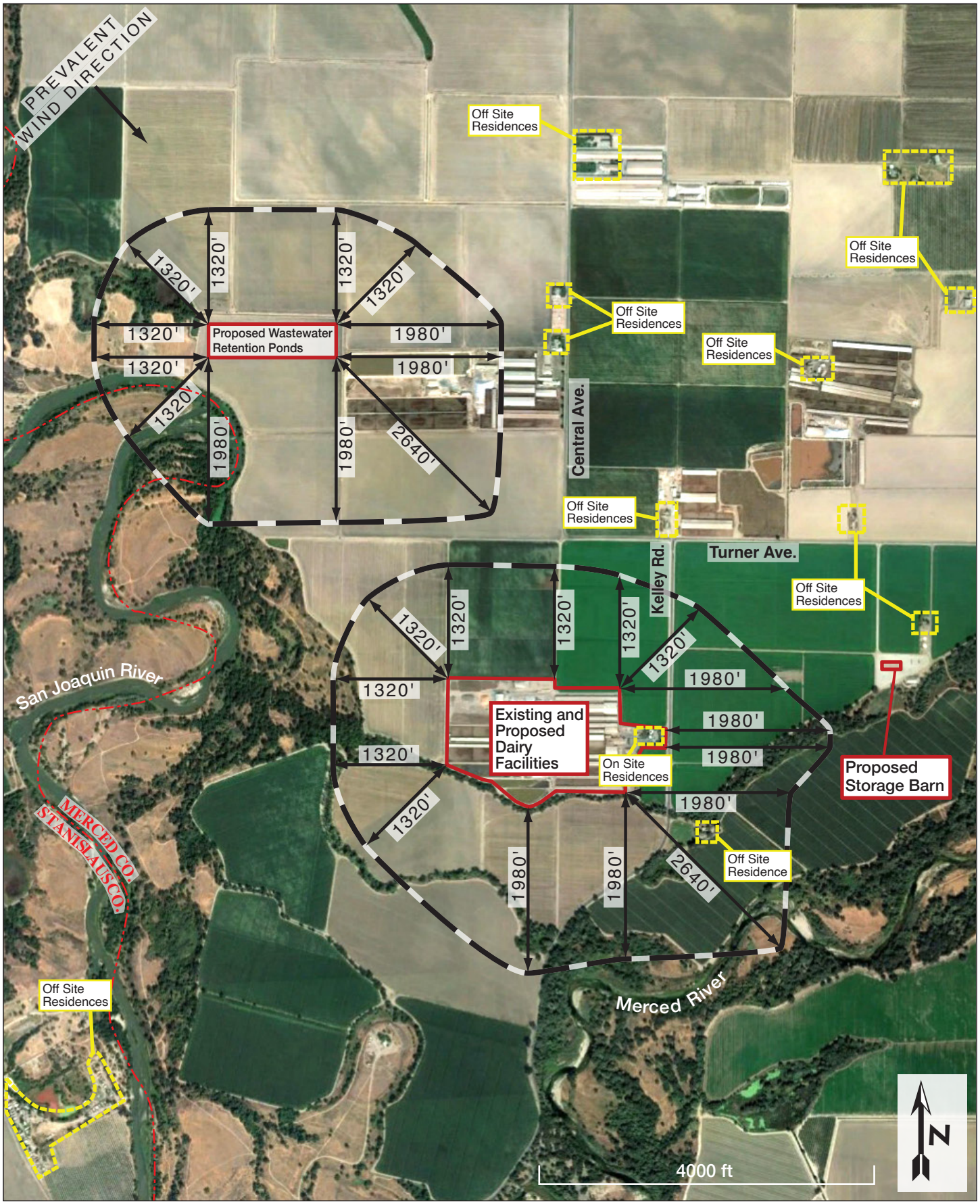
Table 2 Surrounding Land Uses at the Borba Dairy Farms

Location	Land Use	General Plan	Zoning
ON SITE	Dairy / Agriculture / Residences	Agricultural	General Agricultural A-1
NORTH	Agriculture / Animal Confinement Facility / Residences	Agricultural	General Agricultural A-1
EAST	Agriculture / Residences	Agricultural	General Agricultural A-1
SOUTH	Agriculture / Merced River	Agricultural	General Agricultural A-1
WEST	Agriculture / Open Space / San Joaquin River	Agricultural	General Agricultural A-1

Source: Project Site Visit, August 5, 2021; Project Applicant 2021; Merced County GIS 2021.

The Merced River is located approximately 0.4 miles south of the project site, and the San Joaquin River is located approximately 0.5 miles west of the project site. The George J. Hatfield State Recreation Area is located approximately 0.25 miles to the south of the active dairy facilities. The boundary of the Grasslands Focus Area is located approximately 0.9 miles south of active dairy facilities. The Stanislaus County line is located 0.5 miles to the west of the dairy site.

Project details such as adjacent land uses and cropping patterns could change over the course of evaluation, and from those existing at the time of this Initial Study. These changes, however, would consist of agricultural and ancillary uses consistent with the 2030 Merced County General Plan, and would not affect the analysis contained in this Initial Study.



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Planning Partners 2021

Figure 6

Active Dairy Facilities and Nearby Residences Located in the Windshed

PROJECT CHARACTERISTICS

The project sponsor has applied for a new Conditional Use Permit (CUP20-014) from Merced County to modify and expand the existing dairy to house 4,000 milk cows, 500 dry cows, and 2,100 support stock (see Table 3). Considering the existing animals as the dairy facility, the proposed expansion would represent an increase of 2,150 animals from existing numbers.

Table 3 Existing and Proposed Herd at the Borba Dairy Farms

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)	Total Animals
Existing NMP	2,000	350	800	750	300	250	4,450
Proposed NMP	4,000	500	1,600	0	0	500	6,600
Change	**2,000**	**150**	**800**	**-750**	**-300**	**250**	**2,150**

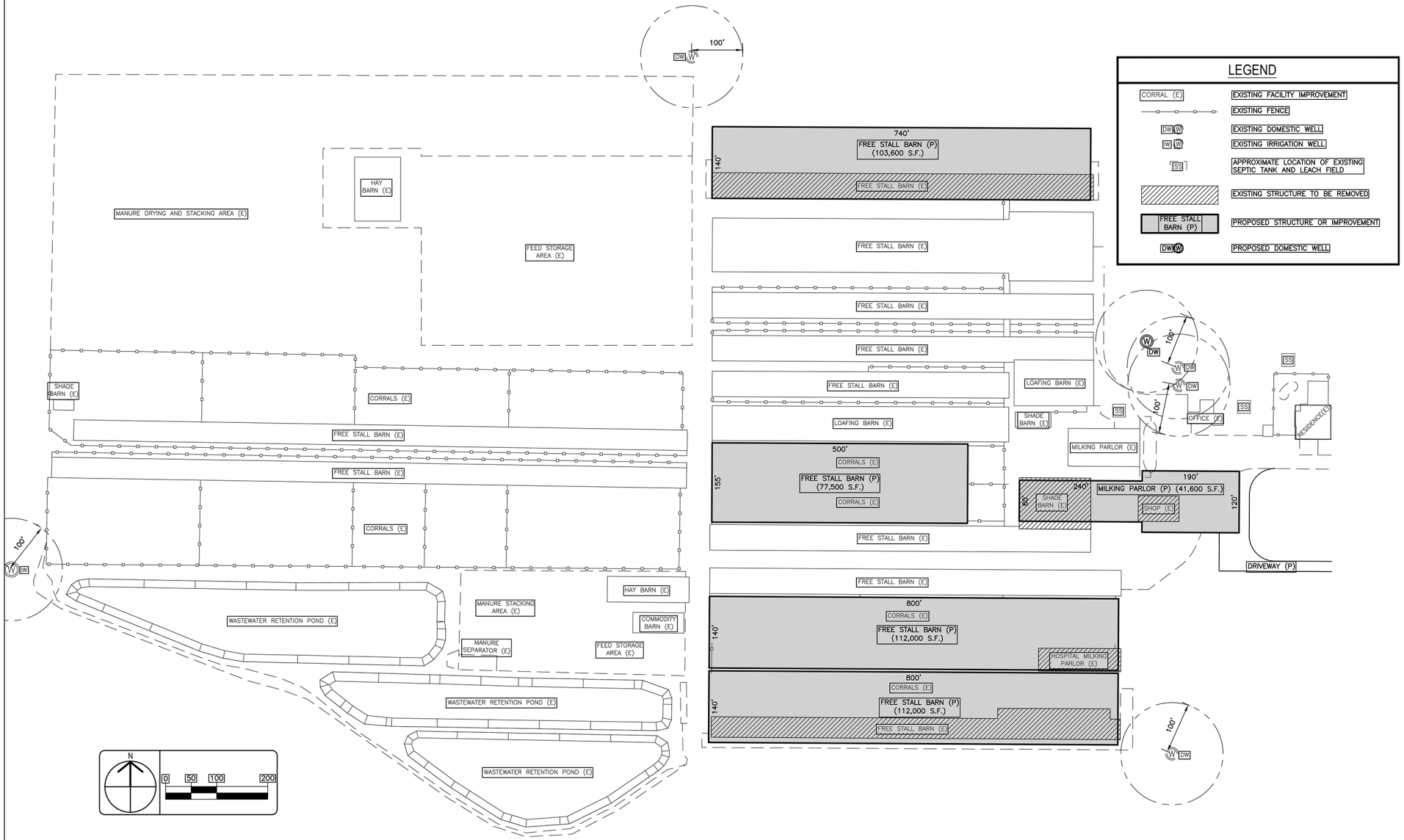
Note: This evaluation considers maximum buildout.

Source: Existing Conditions Nutrient Management Plan (09/15/2014); Proposed Conditions Nutrient Management Plan (08/24/2021).

The proposed project would include the construction of supporting buildings and structures at the existing dairy, including:

- four (4) new freestall barns
- new milking parlor
- two (2) new wastewater storage ponds and associated pipeline
- new agricultural storage barn
- new domestic well at the dairy to replace the oldest existing domestic well on the dairy parcel

The four (4) new freestall barns would be approximately 103,600 square feet, 77,500 square feet, 112,000 square feet, and 112,000 square feet. All barns would consist of a concrete foundation and steel beam supports with corrugated metal roofs. Freestall barns would include concrete lanes for animal access and flushing. A new 41,600 square-foot milking parlor would be constructed. A 21,150 square-foot agricultural storage barn would also be constructed for equipment storage to the east of active dairy facilities. Two new wastewater storage ponds would be constructed north of the dairy site, on APN 045-060-009. The new ponds would be built to the Central Valley Regional Water Quality Control Board (CVRWQCB) Tier 1 pond standard, using a double 60-mil HDPE liner. There is an existing pipeline that runs from the existing wastewater ponds north to a mixing box constructed on an existing irrigation pipeline. A new wastewater pipeline would connect near the mixing box (with manifolding and valving to bypass the irrigation system) and run northwest to the proposed ponds. The proposed pipelines would likely be constructed with polyvinyl chloride (PVC) and would be 12-18 inches in diameter. See Figure 7a for the proposed dairy site plan and replacement well, Figure 7b for the proposed wastewater storage ponds and existing and proposed pipeline locations, and Figure 7c for the proposed storage barn.

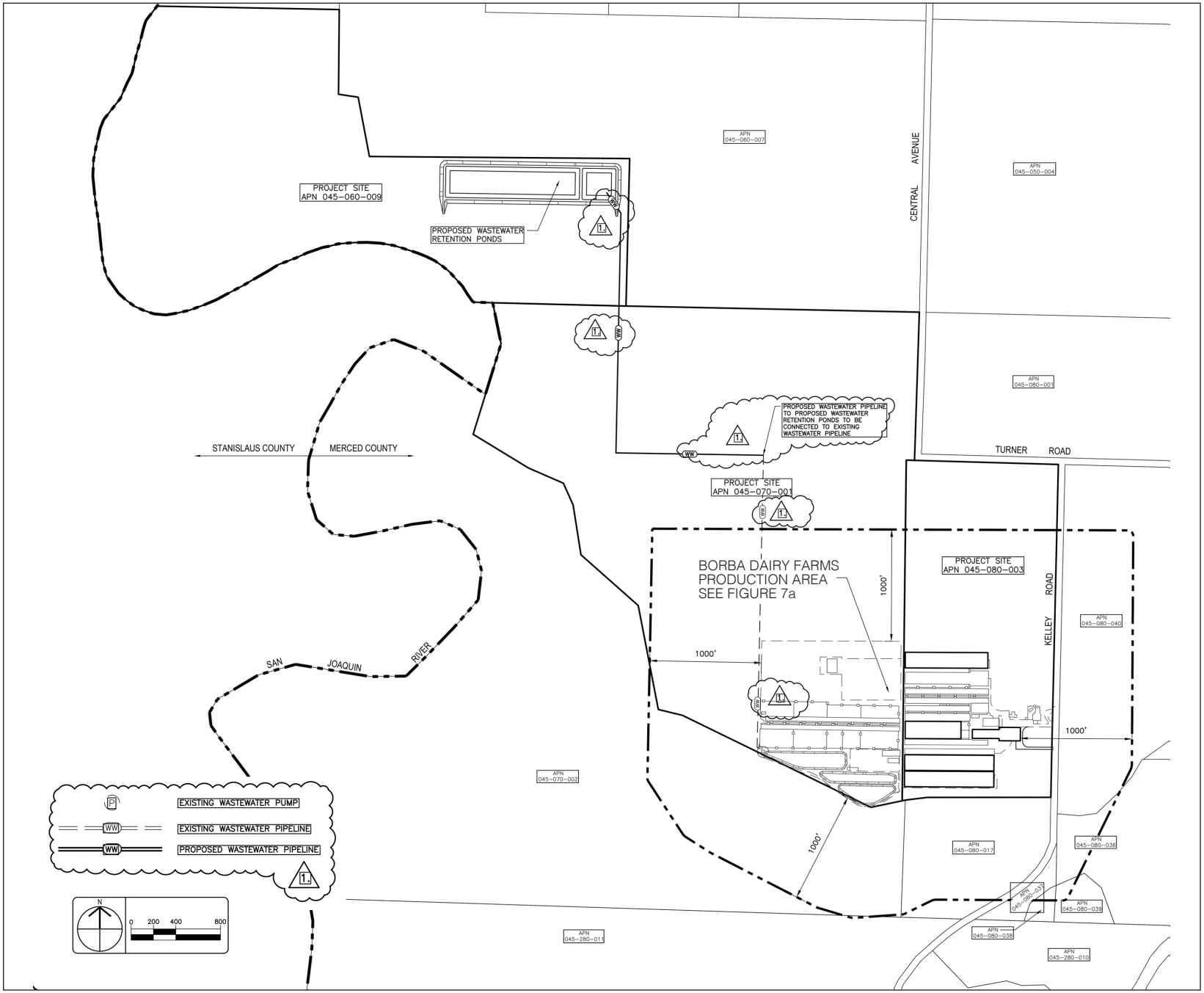


Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Sousa Engineering, 2021

Figure 7a

Proposed Dairy Facilities

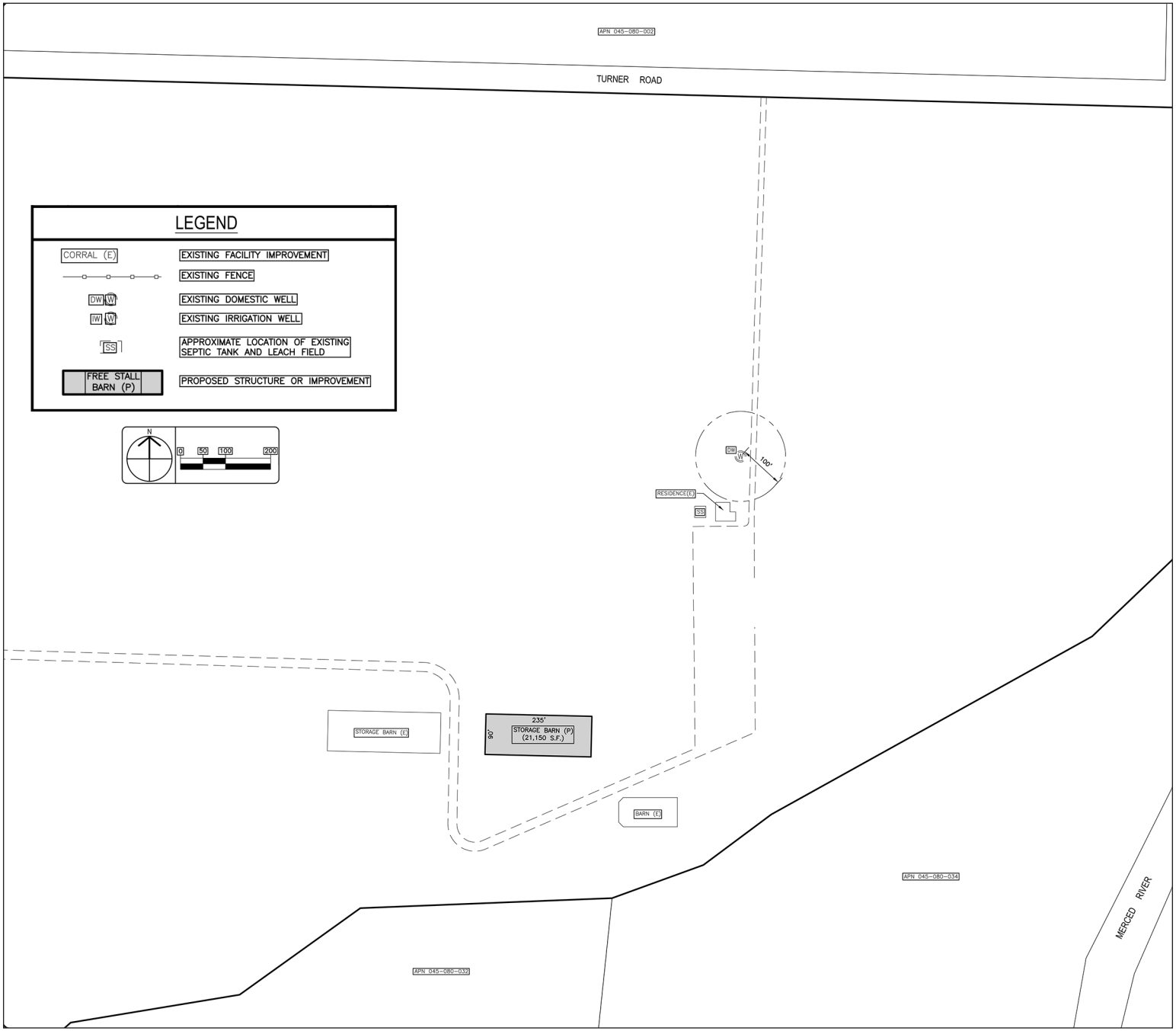


Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Sousa Engineering, 2020

Figure 7b

Proposed Wastewater Retention Ponds



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Sousa Engineering, 2021

Figure 7c

Agricultural Storage Barn

With construction of the proposed facilities, an existing shade barn, shop, hospital milking parlor, and freestall barn would be removed. With implementation of the proposed dairy expansion, new structures would consist of approximately 467,850 square feet of construction and 91,700 square feet of structures would be removed, for a total of 945,125 square feet of existing and proposed structures.

Cropped acreage associated with the expanded dairy operations would include approximately 887 acres, including the addition of 404 acres within Fields 32 through 38 (see Table 1 and Figure 5 for existing fields and Table 4 and Figure 8 for the proposed layout of the dairy fields). Construction of the proposed facilities would result in the conversion of approximately 24.2 acres of cropland to active dairy facilities: the proposed ponds would remove approximately 14.2 acres of cropland from production, the northernmost freestall barn would remove approximately 0.8 acres of cropland, the proposed milking parlor and driveway area would remove another 1.2 acres, and the proposed agricultural storage barn would remove approximately 8 acres of cropland. Crops grown on site would continue to be used for dairy feed crops and supplement imported grain and hay.

Fields 32 through 38 are already graded to guide excess applied irrigation water to an existing tailwater return and/or retention system. Collected tailwater from Field 32 and Field 33 is returned to top of the field. Tailwater from Field 34 can be directed back into the irrigation pipeline or discharged to the slough through Field 38. Field 38 and Field 37 can discharge directly to the slough; however, both fields have control valves at the drains which can be closed when required. Similarly, Field 35 can drain directly to the river, but has a control valve at the drain which can be closed if necessary. Field 36 drains into the Borba River Field, which has no direct connection to any rivers or sloughs. The discharges are controlled such that when manure or wastewater are applied to fields, the discharge valves are closed and the tailwater does not discharge to surface water, consistent with the Merced County Animal Confinement Ordinance (ACO) and CVRWQCB requirements.

Table 4 Proposed Conditions: Borba Dairy Farms Project Parcels, Acreage, and Use

APN*	Field	Gross Acreage	Cropped Acreage**	Use	Nutrients Applied	Irrigation Source***
045-080-003	1	88	5	Active dairy facilities, residence, cropland: corn silage/oat silage	WW	River pump
	2		56			
045-070-001	3	284	49	Active dairy facilities, cropland: corn silage/oat silage	WW	River pump
	4		74			
	5		75			
045-060-009	6	185	32	Wastewater ponds, cropland: corn silage/oat silage	WW	River pump
	7		30			
045-080-040	8	185	85	Agricultural storage barn, cropland: corn silage/oat silage	WW	60 HP Pump
	9		52			
	10		5			
	11		20			
045-060-004	32	50	44	Cropland: corn silage/oat silage	WW	TID Canal

Table 4	Proposed Conditions: Borba Dairy Farms Project Parcels, Acreage, and Use					
APN*	**Field**	**Gross Acreage**	**Cropped Acreage****	**Use**	**Nutrients Applied**	**Irrigation Source*****
045-060-006	33	45	82	Cropland: corn silage/oat silage	WW	TID Canal
045-060-013		42				
045-060-012	34	96	46	Cropland: corn silage/oat silage	WW	TID Canal
	35		34	Cropland: corn silage/oat silage	SM	TID Canal
045-060-011	36	43	52	Cropland: corn silage/oat silage	SM	TID Canal
045-060-012	37	79	130	Cropland: corn silage/oat silage	SM	60 HP Pump
045-030-023		55				
045-030-024		16				
045-030-025		33				
045-030-028		24				
045-060-012	38	79	16	Cropland: corn silage/oat silage	SM	60 HP Pump
Total		**1,223**	**887****			

Notes: APN = Assessor's Parcel Number. WW = wastewater. DM = Dry Manure. SM = Solid Manure. HP = horsepower; TID = Turlock Irrigation District

* APNs listed in the table may differ from the NMP as they have been updated to reflect modified APN numbers according to Merced County records.

** Approximate acreage. Cropped acreage is based on the Proposed Conditions NMP dated 08/24/2021. Nutrients may not be applied to the gross acreage of the parcel listed, but only the cropped acreage listed. Field acreage may differ from the Existing Conditions NMP due to updated measurements. Construction of the proposed facilities would result in the conversion of approximately 24.2 acres of cropland. Total cropped acreage would be increased to approximately 887 acres, including the addition of 404 acres over fields 32 through 38.

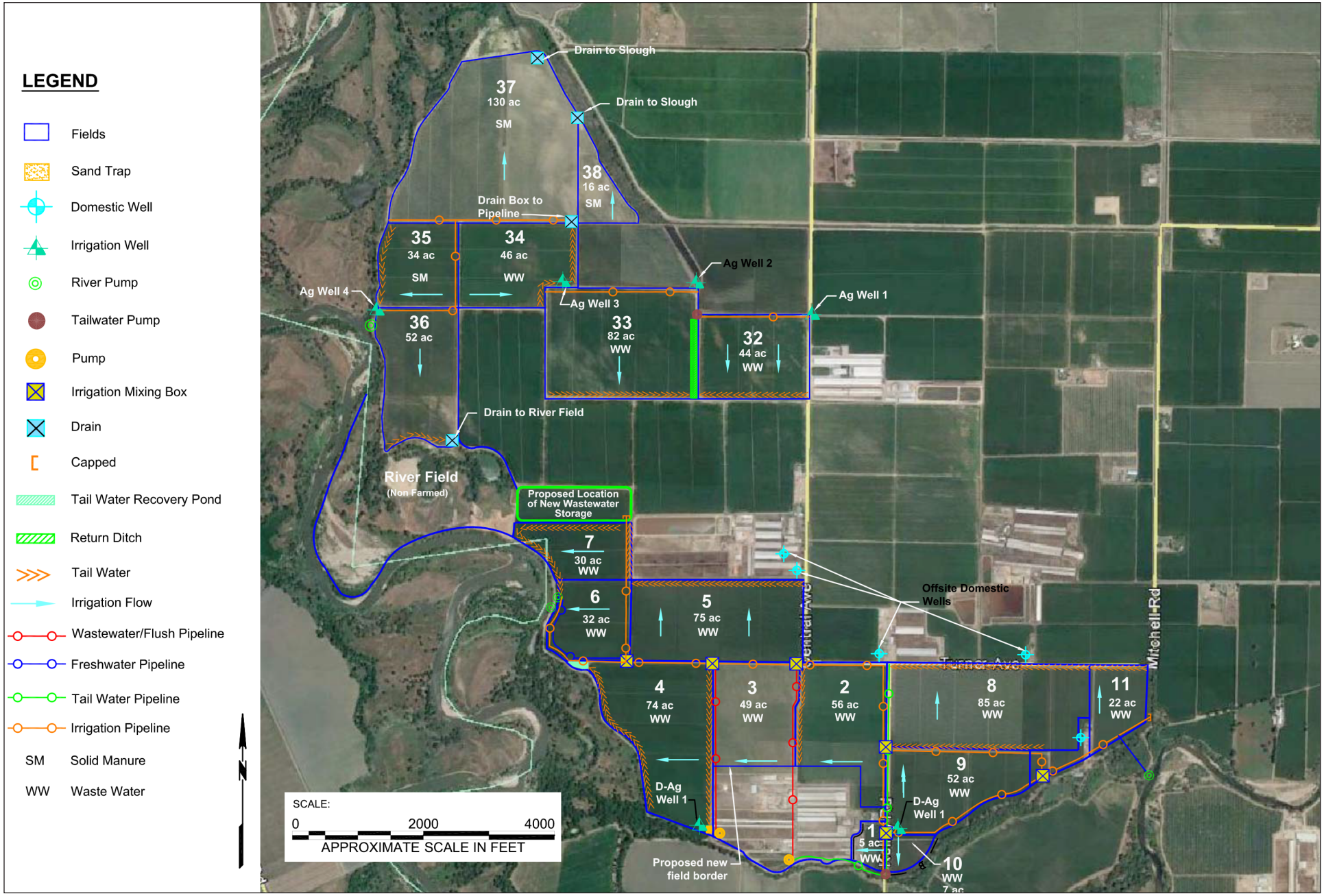
*** The proposed NMP cited irrigation sources include two groundwater irrigation wells (60 HP Pump), a surface water River Pump, and a surface water TID Canal. In addition, the NMP materials indicate only liquid manure or dry manure is applied to individual cropped fields, but both liquid and/or solid manure can be applied at the dairy operator's discretion as long as nutrient planning targets are met.

Source: Borba Dairy Farms Proposed Conditions Nutrient Management Plan (08/24/2021). Merced County GIS May 2021.

The closest offsite residence to existing active dairy facilities is located approximately 1,025 feet east-southeast of the active dairy facilities. With the proposed dairy expansion, distances to this residence would not be reduced (see Figure 9).

Animal wastes from freestall and other concrete-surfaced areas would continue to be flushed to the existing on-site waste management system in addition to new proposed ponds, except for solid manure within corral areas, which would continue to be scraped. Liquid manure would continue to be directed to the wastewater storage ponds.

Stormwater runoff from impervious surfaces and roofed areas would continue to be routed to the wastewater pond, except for stormwater from several barns, which would continue to be routed to the river. Wastewater would continue to be mixed with irrigation water and applied to the fields.

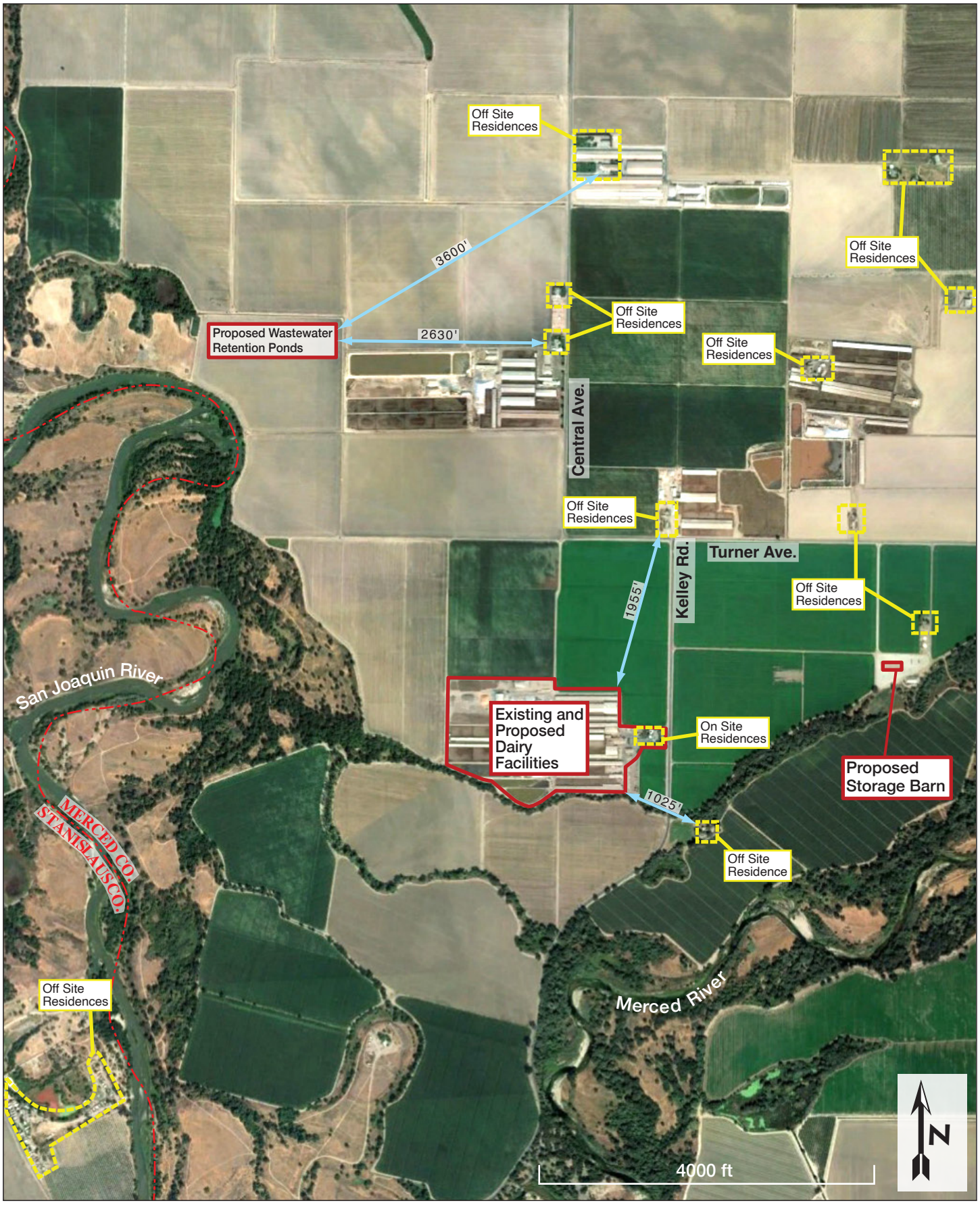


Borba Dairy Farms Expansion Project CUP20-014

SOURCE: FR Ag Services, Inc., 2021

Figure 8

Proposed Dairy Field Layout



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Planning Partners 2021

Figure 9

Distance of Nearest Off-site Residences to Existing and Proposed Active Dairy Facilities

Solid manure that accumulates within corrals would continue to be scraped and composted onsite. Dry manure and almond shells would continue to be used for bedding; additional manure would be sold and hauled off site for use as fertilizer and soil amendments. As reported in the NMP, exported solid manure applied to off-site agricultural fields not owned by the project applicant would increase from 15,000 tons of solid manure from the dairy facility to 25,000 tons of solid manure with the proposed expansion (approximately 19 percent of previously separated solids)[2]. While the exact location of these off-site cropland parcels may vary throughout operations, the disposal of manure at off-site locations and the acreage necessary to properly dispose of manure liquids and solids are accounted for in the project NMP. Figure 10 shows a cross-section of a freestall dairy barn and Figure 11 illustrates the processes that occur at a dairy farm.

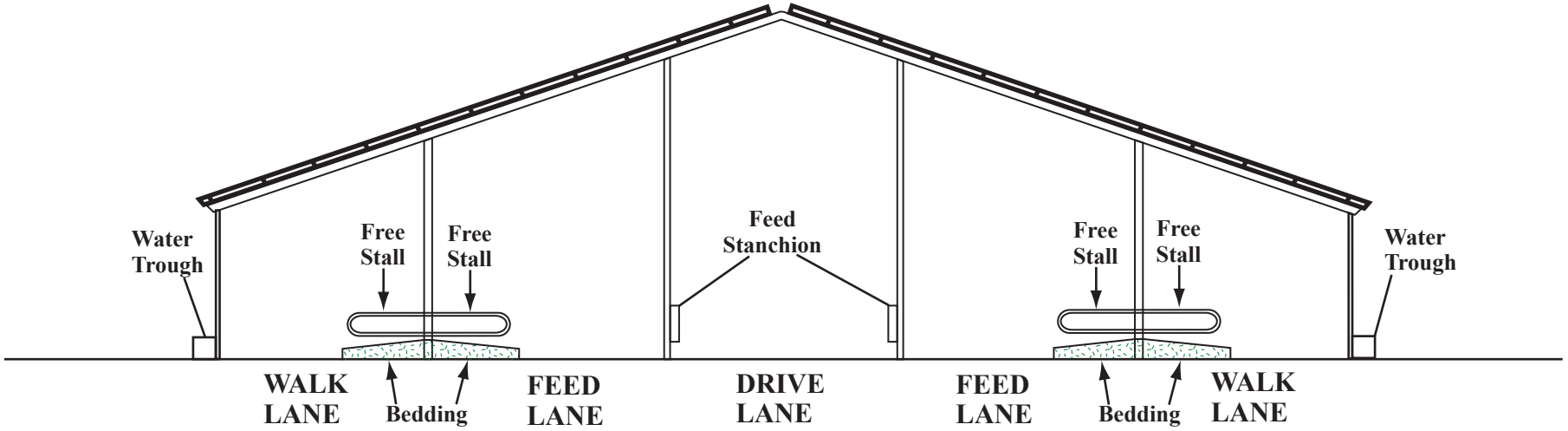
The dairy facility uses and stores diesel fuel, motor oil, hydraulic oil, and other petroleum products associated with the operation of heavy equipment. The dairy facility also uses and stores cleaning and maintenance materials that may be categorized as hazardous. The HMBP prepared for this facility has been updated to reflect the types and quantities of these materials.

The proposed dairy expansion would rely on existing utilities, including domestic water, stormwater, and electrical services. Electrical service is provided by the Turlock Irrigation District. The project includes new building mounted lighting on the proposed structures.

The project applicant has prepared an Odor Control Plan and Vector Control Plan in accordance with ACO Chapter 18.64.060. As part of the Odor Control Plan, the dairy operator will provide a point of contact to residents within the windshed of the dairy should nuisance odors occur. The dairy operator will respond to neighbors who are adversely affected by odors and take corrective action.

Operations at the dairy would continue to occur 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. With implementation of the proposed project, the number of employees would remain at 20 workers, and the number of employees onsite at any one time is expected to stay at fourteen (14) or decrease slightly due to the expected efficiency of the proposed milking parlor.

[2] The dairy facility has a limited land base, which would be reduced with the proposed expansion. The proposed increase in herd would result in an associated increase in manure and greater increase in exports. With the amount of irrigated land in the area, there is a high demand for dairy manure as an economical fertilizer source for other growers, and the increased manure to be exported would easily be sold to third-party fertilizer companies.

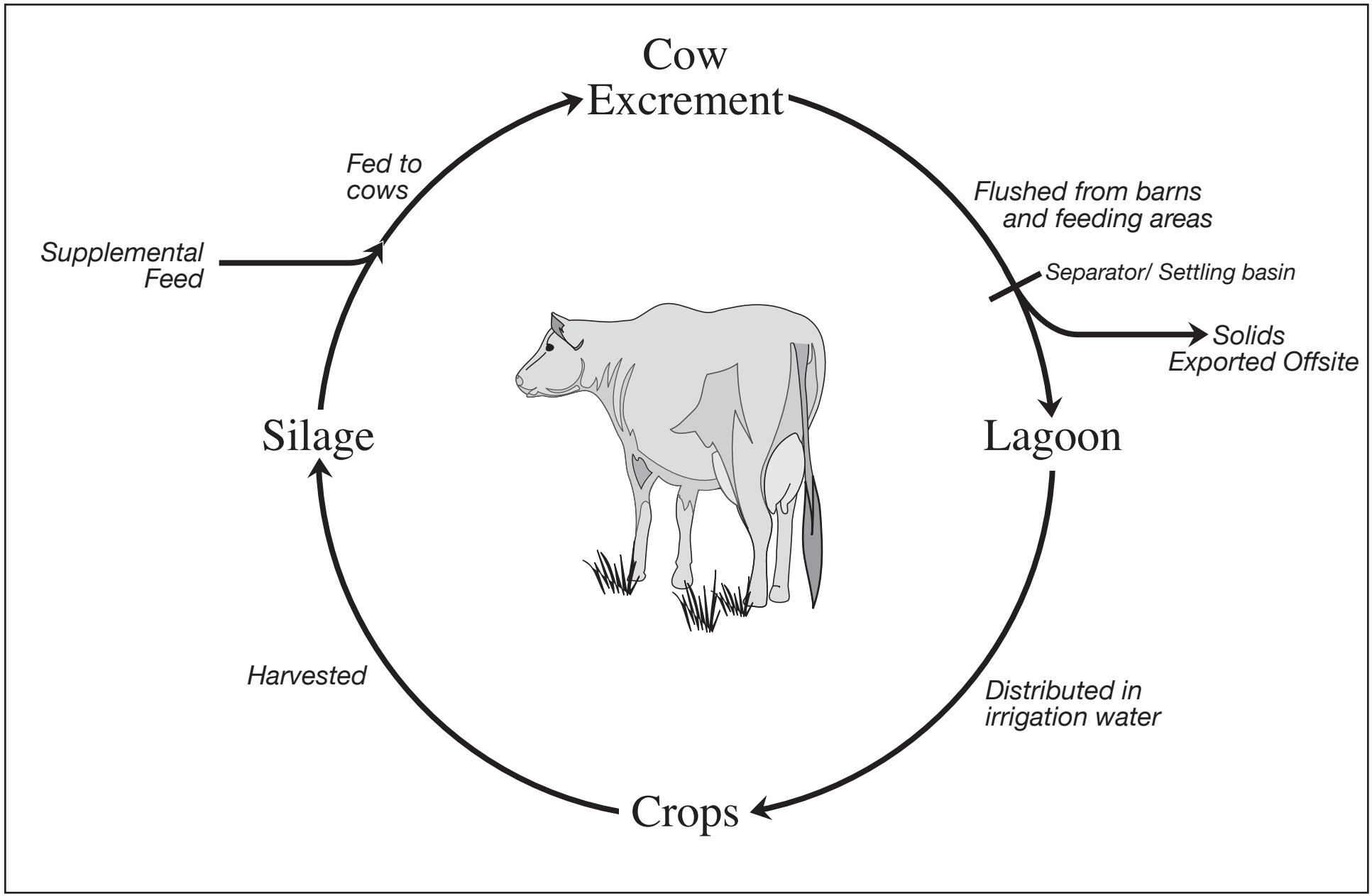


Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Planning Partners, 2021

Figure 10

Freestall Dairy Barn - Schematic Cross-Section



Borba Dairy Farms Expansion Project CUP20-014

SOURCE: Planning Partners 2021

Figure 11
Process Diagram

Circulation and Parking

The project site would continue to be served by heavy trucks (milk tankers, commodity deliveries), and other vehicles. Daily trips by all classes of vehicle are estimated to increase from approximately 62.0 to 75.1 average daily trips, with an increase of 13.1 daily trips from heavy trucks (see Table 5). The majority of trips would consist of auto and light truck trips. All trips would continue to be made via Kelley Road. There is parking provided on site.

Table 5 Borba Dairy Farms Expansion Project Trip Generation and Assignment

Trip Type/Purpose	Daily Trip Generation Factor	Type of Vehicle	Daily Trips		Local Route of Trip
			Existing	With Project	
On Site Residential Dwellings	2/residence *See Note 1	Auto/Light Truck	2	2	Kelley Rd
Employees (off-site)	2/employee *See Note 2	Auto/Light Truck	40	40	Kelley Rd
Milk Tanker	*See Note 3	Heavy Truck	4	6	Kelley Rd
Commodities transport from off site	*See Note 4	Heavy Truck	4	6	Kelley Rd
Solid and liquid manure transport to off-site fields	*See Note 5	Heavy Truck	2.1	4.1	Kelley Rd
Silage transport	*See Note 6	Heavy Truck	7.7	14.7	Kelley Rd
Rendering Service	*See Note 7	Medium Truck	0.1	0.1	Kelley Rd
Veterinarian	*See Note 8	Light Truck	0.1	0.1	Kelley Rd
Purveyor sales	2/facility office	Auto/Light Truck	2	2	Kelley Rd
	Total Auto/Light Truck Trips		**44.1**	**44.1**	
	Total Medium Truck Trips		**0.1**	**0.1**	
	Total Heavy Truck Trips		**17.7**	**30.8**	
	Total Trips		**62.0**	**75.1**	

Table 5 Borba Dairy Farms Expansion Project Trip Generation and Assignment

Notes: Trip Generation table based on Planning Partners assumptions and information obtained from project applicant.

1. There is one residence located at the dairy facility occupied by the owner. For a dairy farm operation, a trip generation factor of 2 trips per day was used for both on-site residences and off-site employees.
2. There are currently 20 employees. Since there are no employee residences on site, it is assumed there are 20 off-site employees driving to work per day. There would be no change in the number of employees with the proposed expansion.
3. One milk tanker truck visits the site four (4) times daily. With the proposed expansion, the tanker truck will visit six (6) times daily.
4. There are four (4) commodity truck trips from offsite per day, and there would be six (6) with the proposed expansion.
5. Commercial manure hauling vehicles are on-site for approximately one (1) week annually to remove solid manure. Currently, there are approximately 750 diesel truck trips per year to export dry manure to off-site fields. Under proposed operations, there would be approximately 1,500 diesel truck trips per year to export dry manure to off-site fields.
6. Commercial silage trucks are on-site for approximately two (2) weeks annually during harvest to haul feed crops. Currently, there are approximately 2,800 truck trips per year to haul feed crops, and under proposed operations, there would still be approximately 5,360 truck trips per year.
7. A tallow truck (i.e., dead animal removal service) visits the site once per week, and would remain at once weekly with the proposed expansion.
8. A veterinary truck visits the site once every week.

Source: Planning Partners 2021. Project Applicant 2021.

PROJECT CONSTRUCTION AND PHASING

The proposed dairy expansion construction is anticipated to begin within five (5) years after issuance of the CUP, depending on market conditions. Construction of the proposed dairy facilities would occur in as many as six phases (one phase for each structure and one phase for the new ponds) and would take up to 10 years to complete.

Construction equipment would include scrapers, water trucks, construction crew pickups, concrete trucks, material delivery trucks, and lifts. The project applicant anticipates approximately 8,000 cubic yards of soil excavation, and 16,000 cubic yards of fill. Approximately 8,000 cubic yards of dirt would be imported for fill.

PROJECT PERMITTING HISTORY

The dairy facility was originally permitted in 1990 under Merced County permit AP172. The AP172 permit allowed for 600 milk cows plus support stock, to total 952 total animal units[3]. The NMP indicates that the facility has been in operation since 1994.

To allow for the expansion of the dairy, the applicant has submitted an application for issuance of a new Conditional Use Permit (CUP20-014) from the County. It is this action that is the subject of this Initial Study and NOP. The Central Valley Regional Water Quality Control Board and the San Joaquin Valley Air Pollution Control District (SJVAPCD) both regulate the existing dairy. As

[3] An animal unit is a standardized measure of agricultural animals. A 1,000-pound beef cow is the standard measure of an animal unit.

responsible agencies, they will be required to use the County's environmental document in their consideration of the proposed dairy expansion.

The CVRWQCB regulates the existing dairy under the Reissued Waste Discharge Requirements General Order for Existing Milk Cow Dairies (Order R5-2013-0122). Coverage under the General Order requires approval and implementation of a NMP for the application of waste to land application areas, and a WMP to ensure proper compliance with the General Order (see Appendix B for a copy of the proposed conditions WMP and NMP). As established by the Report of Waste Discharge (ROWD) submitted for the existing dairy to the CVRWQCB in October 2005, the State-permitted herd size for the dairy is 2,350 milk and dry cows combined[4], with regulatory review required for expansions of greater than 15 percent above this value (2,703 milk and dry cows combined). The project applicant has submitted a Report of Waste Discharge Form 200 for the proposed dairy expansion (received by the Board on 12/3/2020). To permit the proposed expansion, the CVRWQCB would be required to issue Individual Waste Discharge Requirements (WDR) for the operation.

The Permit to Operate (PTO) on file for the dairy facility (expiration date 12/31/2023) issued by the SJVAPCD allows 2,000 milk cows (not to exceed a combined total of 2,350 mature cows), 1,850 support stock (heifers), and 250 calves (0-3 months) in aboveground hutches. An Authority to Construct (ATC) application would be required by the project applicant to modify the PTO from the SJVAPCD for the proposed dairy expansion. The project applicant may be required to submit a modification request to their existing Conservation Management Practices Plan (CMP) based on their proposed dairy expansion. According to the project applicant, the SJVAPCD permit applications were submitted to the District on October 13, 2020.

REGULATORY COMPLIANCE AUDIT

The Merced County Community and Economic Development Department requests regulatory compliance audits of expanding dairies from the Division of Environmental Health as part of the Conditional Use Permit (CUP) evaluation process prior to project approval. The DEH staff performed an inspection of the Borba Dairy Farms on May 21, 2021. The DEH concluded that the dairy facility was in substantial compliance with the ACO on June 24, 2021.

ESTABLISHING THE PROPER "BASELINE" FOR THE PROPOSED DAIRY EXPANSION

To determine whether an impact is significant, a "baseline" set of environmental conditions is required against which agencies can assess the significance of project impacts. As established by California Environmental Quality Act (CEQA) Guidelines Section 15125(a), the existing environmental setting, usually established at the time a Notice of Preparation is issued, should normally constitute the baseline. Therefore, "the impacts of a proposed project are ordinarily to be compared to the actual environmental conditions existing at the time of CEQA analysis, rather than to allowable conditions defined by a plan or regulatory framework" (Communities for a Better Environment v. South Coast Air Quality Management District (2010) 158 Cal.App.4th 1336).

[4] The CVRWQCB regulates only mature cows (milk and dry) and does not establish any limits on calves, heifers, and other support stock.

Essentially, prior operating permits or permit levels do not in themselves establish a baseline for CEQA review of a new project.

As set forth in Communities for a Better Environment v. South Coast Air Quality Management District, a long line of California Court of Appeals decisions has upheld this line of reasoning. These decisions have included cases where a plan or project allowed for greater development or more intense activity than had so far actually occurred, as well as cases where actual development or activity had, by the time CEQA analysis was begun, already exceeded that allowed under the existing regulations.

In the case of the Borba Dairy Farms Expansion project, existing permits from the SJVAPCD and CVRWQCB allow for similar cow numbers at the existing dairy, including 2,350 mature cows for each agency permits. In accordance with CEQA, the baseline herd to be used in this environmental analysis is the herd count at the time that the NOP is circulated, comprising a total of 4,450 animals, including 2,350 mature cows.

REQUIRED APPROVALS, OTHER PROCESSES, AND CONSULTATIONS

A listing and brief description of the regulatory permits and approvals required to implement the proposed project is provided below. This environmental document is intended to address the environmental impacts associated with all of the following decision actions and approvals.

Merced County and Other Local and Regional Agencies

Merced County

The County has the following permitting authority related to the proposed Borba Dairy Farms Expansion project:

- Preparation and approval of an Environmental Impact Report - Merced County will act as the lead agency as defined by CEQA, and will have authority to determine if the Environmental Impact Report is adequate under CEQA.
- Approval of the Conditional Use Permit - Merced County will consider the proposed dairy project as a "Conditional Use Permit." Conditional Use Permits are discretionary permits for uses of land that require special review to ensure that they are compatible with the neighborhood and surrounding land uses. They are considered more likely to affect surrounding land uses than uses permitted by right in a zoning district or those uses permitted under Administrative Permits.
- Building Permit - Merced County will require a building permit for the proposed dairy expansion project.
- Demolition Permits – Merced County will require a demolition permit for each feature to be demolished.
- Animal Confinement Facility Liquid Manure Retention Pond or Settling Basin Permit (PE 1408) – The Merced County Division of Environmental Health will require a permit for the construction of new liquid manure retention ponds.

- Hazardous Material Business Plan (HMBP) - The on-site storage of any hazardous material over threshold quantities (55 gallons; 200 cu. ft.; or 500 pounds) would require a HMBP to be filed with the Merced County Division of Environmental Health (DEH). Any quantity of hazardous waste generated on site also requires that a HMBP be filed. A Hazardous Material Business Plan for the proposed dairy expansion was submitted and accepted by Merced County Department of Environmental Health on December 8, 2020.
- Right-of-Way Dedication – The Merced Department of Public Works, Roads Division will require Right-of-Way Dedication by the applicant along Kelley Road fronting the property. Kelly Road has an existing 60-foot right-of-way, and the owners shall dedicate an additional 10 feet of right-of-way along the Kelley Road frontage of the property.
- Roadway Impact Evaluation or Roadway Impact Agreement - The applicant shall enter a Roadway Impact Agreement with the Merced County Department of Public Works, Road Division to mitigate potential effects to roadway integrity from heavy truck traffic prior to issuance of a building permit. As part of the Agreement, a roadway impact evaluation shall be prepared to assess the potential impact that the project may have on Merced County roadways. The evaluation and/or agreement will determine an amount for the applicant to pay to the Merced County Road Fund to compensate the County for the increased cost of maintaining the County roadways impacted by the applicant's project.

San Joaquin Valley Air Pollution Control District

- Authority to Construct / Permit to Operate – The owner or operator of any facility or activity (including agricultural activities) that emits criteria air pollutants or their precursors above certain thresholds must first obtain an ATC from the SJVAPCD. All new sources exceeding thresholds will be required to apply for an ATC and PTO; this essentially is one permit that is issued in two steps. The applicant first obtains an ATC with specific conditions for implementation during construction; then an inspection is completed and, if all the conditions of the ATC are met during construction, the applicant is issued a PTO. Beyond the ATC and PTO, preparation of an air quality impact assessment (AQIA) would be required, in addition to compliance with other SJVAPCD regulations.
- Conservation Management Practices Plan – The owner or operator of any agricultural facility of 100 acres or more, or an animal confinement facility in excess of 500 mature cows (for a dairy operation), must have submitted a CMP plan to the SJVAPCD prior to June 30, 2004 for existing uses, and prior to operation for proposed uses. The project applicant may be required to submit a modification request to their existing CMP Plan based on their proposed dairy expansion. A CMP plan requires that farm operators implement dust reduction practices for each of the following categories: harvest; unpaved roads; unpaved equipment/vehicle yards; and, other. One CMP Plan must be submitted for each crop currently grown or that will be grown within the two-year time frame of each Plan.

State of California

State agencies have the following permitting authority related to the proposed Borba Dairy Farms Expansion project:

State Water Resources Control Board

- General Construction Activity – The State Water Resources Control Board (SWRCB) has adopted a General Construction Activity Storm Water Permit for storm water discharges associated with any construction activity, including clearing, grading, excavation, reconstruction, and dredge and fill activities, that results in the disturbance of at least one acre of total land area.

Regional Water Quality Control Board - Central Valley Region

- Waste Discharge Requirements – The owner or operator of any facility or activity that discharges, or proposes to discharge, waste that may affect groundwater quality or from which waste may be discharged in a diffused manner (e.g., erosion from soil disturbance) must first obtain a WDR permit from the CVRWQCB. The CVRWQCB regulates discharges from dairies and other confined animal facilities according to the anti-degradation requirements of the Porter-Cologne Water Quality Control Act and the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. The project applicant has submitted a Report of Waste Discharge for the proposed dairy expansion. The CVRWQCB will be issuing Individual WDRs for the Borba Dairy Farms Expansion. The proponents of the dairy plan to comply with the evolving CVRWQCB Salt Control Program as well.

Federal Government

It is anticipated that no permitting from federal agencies would be required.

APPLICATION OF THE 2030 MERCED COUNTY GENERAL PLAN, MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE, AND MERCED COUNTY ZONING CODE

2030 Merced County General Plan

The 2030 Merced County General Plan guides economic development, land use, agriculture, transportation and circulation, public facilities and services, natural resource, recreation and cultural resources, health and safety, air quality, water, and other matters of public interest and concern. The General Plan is intended to provide for orderly growth, and to convey the community's values and expectations for the future. An EIR for the 2030 General Plan was certified and the General Plan was adopted by Merced County in December 2013. A Draft Background Report of existing environmental conditions within the County was finalized in December 2013 with certification of the General Plan EIR. The Background Report functions as the existing setting section for the General Plan EIR. The EIR, including the Background Report as updated, is used in this Initial Study and will be used in the proposed project EIR, along with other resources, to establish the existing setting for the proposed project. The General Plan EIR will serve as the first tier of environmental analysis for the proposed project, including the evaluation of countywide and cumulative impacts. The 2030 General Plan EIR, including the Background Report, is hereby

incorporated by reference pursuant to State CEQA Guidelines Section 15150 as though fully set forth herein. A copy of the General Plan, General Plan EIR, and Background Report can be obtained at the Department of Community and Economic Development, 2222 "M" Street, Merced, CA 95340. These documents are also available for download from the Merced County General Plan website at:

https://www.co.merced.ca.us/100/General-Plan

Merced County Animal Confinement Ordinance and Zoning Code

On October 22, 2002, Merced County adopted revisions to the County's Animal Confinement Ordinance (ACO). Additional revisions to the Merced County ACO and Merced County Code Chapter 18.10 (Zoning Code Agricultural Zones) were adopted on February 8, 2005 (the text of the ACO is included in Appendix A, bound separately). (The Merced County ACO is included as Chapter 18.64 of Title 18 Zoning of the Merced County Code[5].) A comprehensive update and amendment of Title 18 of the Merced County Code was adopted by the Board of Supervisors on October 22, 2019. The ACO regulates the design, construction, and operation of animal confinement facilities within the county. Because the Ordinance is regulatory rather than permissive, all existing and proposed animal confinement facilities within the county are required to comply with the terms of the Ordinance, including the proposed Borba Dairy Farms Expansion project.

Following is a summary of major ACO provisions. Copies of the complete text of the Ordinance are available from: the Merced County Division of Environmental Health, 260 East 15th Street, Merced, California 95341; the Merced County Community and Economic Development Department, 2222 'M' Street, Merced, California 95340, and on the County's Internet site at <http://www.qcode.us/codes/mercedcounty/>

Merced County's ACO provides environmental compliance regulations that affect dairies and other animal confinement facilities in Merced County. The ACO requires that all animal confinement facilities, existing and new, complete and implement a Comprehensive Nutrient Management Plan (CNMP). For the construction of a new confined animal facility, or for modification or expansion of an existing animal confinement facility, the CNMP must be completed prior to construction. The purpose of the CNMP is to ensure a balance between manure/wastewater application and nutrient uptake by crops in order to minimize impacts to groundwater. Since adoption of the ACO, the CVRWQCB has issued new requirements for preparation of a NMP and WMP, which would serve in place of the CNMP as allowed by County Code Chapter 18.64.060K.

In addition to the CNMP, the ACO includes measures designed to increase protection of surface and groundwater resources. Both liquid and dry manure are regulated by the ACO under detailed management requirements. For example, the ACO prohibits the storage or application of manure (liquid or dry) within 100 feet of a surface water body or irrigation well unless adequate protection is provided. Dry manure storage and application is regulated to prevent groundwater or surface water contamination. In addition, the liquid manure management system must include provisions for appropriate cropland application and collection of tailwater from cropland irrigated with liquid manure. The ACO requires that all off-site discharge of drainage water from cropland application

[5] A comprehensive update and amendment of Title 18 (Zoning) of the Merced County Code was adopted by the Board of Supervisors on October 22, 2019. The requirements of Chapter 18.64 were unchanged by this action.

areas meet the discharge and receiving water standards of the appropriate irrigation or drainage district and the CVRWQCB.

The ACO also includes design and management provisions for the construction of retention ponds and settling basins to prevent groundwater contamination, obnoxious odors, or excessive fly or mosquito breeding. The retention pond provisions of the ACO apply only to new or expanding animal confinement facilities. The ACO measures for retention ponds and settling basins include capacity requirements, maintenance guidelines, size restrictions, and minimum design standards of 10^{-6} centimeters per second seepage velocity or less.

To prevent nuisances from odors or vectors, the ACO requires animal confinement facilities to implement both odor control measures and a vector control plan. The need for specific control measures is determined by the Merced County DEH on a site-specific basis. Additionally, the ACO prohibits the location of new animal confinement facilities within one-half mile of urban areas or areas zoned for residential uses, or concentrations of rural residences. To provide additional protection from the nuisances mentioned above, the ACO generally prohibits the location of animal confinement facilities within 1,000 feet of an off-site residence, unless written permission from the off-site resident or property owner is given.

The ACO regulates the design, construction, and operation of animal confinement facilities within the County; all existing and proposed animal confinement facilities within the County are required to comply with the terms of the Ordinance, including the Borba Dairy Farms Expansion project. To ensure compliance with the provisions of the ACO, the ACO requires routine inspections of animal confinement facilities by the Merced County DEH. Enforcement of the provisions contained in the revised ACO is conducted by Merced County DEH and the Community and Economic Development Department. In addition, the ACO includes penalties for any person who violates or fails to comply with the provisions of the ACO.

TIERING FROM BOTH THE 2030 MERCED COUNTY GENERAL PLAN EIR AND THE MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE EIR

"Tiering" refers to the relationship between a program-level EIR (where long-range programmatic cumulative impacts are the focus of the environmental analysis) and subsequent environmental analyses such as this subject document, which focus primarily on issues unique to a smaller project within the larger program or plan pursuant to Section 15168 of the State CEQA Guidelines. Tiering focuses the environmental review on the project-specific significant effects that were not examined in the prior environmental review or are susceptible to substantial reduction or avoidance by specific revisions in the project, by the imposition of conditions, or by other means.

In the case of the Borba Dairy Farms Expansion project, the environmental analysis will be tiered from both the EIR for the *2030 Merced County General Plan* and the EIR for the *Merced County Animal Confinement Ordinance Revision*. As the Merced County Animal Confinement Ordinance EIR was completed in 2002, the 2030 Merced County General Plan updates conclusions on the cumulative condition for all project types, including proposed and expanding dairy facility projects such as the Borba Dairy Farms Expansion project. The tiering concept will be discussed more fully in the EIR for this project.

2. ENVIRONMENTAL ANALYSIS

PURPOSE AND LEGAL BASIS FOR THE INITIAL STUDY

As a public disclosure document, this Initial Study provides local decision makers and the public with information regarding the environmental impacts associated with the proposed project. According to Section 15063 of the CEQA Guidelines, the purpose of an Initial Study is to:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration.
2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.
3. Assist in the preparation of an EIR, if one is required by:
    a. Focusing the EIR on the effects determined to be significant,
    b. Identifying the effects determined not to be significant,
    c. Explaining the reasons for determining that potentially significant effects would not be significant, and
    d. Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

INITIAL ENVIRONMENTAL CHECKLIST

Following each major environmental category and topic in the Initial Study, there are four determinations by which to judge the project's impact. These categories and their meanings are shown below:

"No Impact" means that it is anticipated that the project will not affect the physical environment on or around the project area. It therefore does not warrant mitigation measures.

"Less-than-Significant Impact" means the project is anticipated to affect the physical environment on and around the project area, however to a less-than-significant degree, and therefore not warranting mitigation measures.

"Less than Significant with Mitigation Incorporated" applies to impacts where the incorporation of mitigation measures into a project has reduced an effect from "Potentially Significant" to "Less Than Significant." In such cases, and with such projects, mitigation measures will be provided including a brief explanation of how they reduce the effect to a less-than-significant level.

"Potentially Significant Impact" means there is substantial evidence that an effect is significant, and no mitigation is possible.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, including several impacts that could result in a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Energy
	Geology / Soils	X	Greenhouse Gas Emissions	X	Hazards & Hazardous Materials
X	Hydrology / Water Quality	X	Land Use / Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation	X	Tribal Cultural Resources
	Utilities / Service Systems		Wildfire	X	Mandatory Findings of Significance

ENVIRONMENTAL SETTING AND EVALUATION OF POTENTIAL IMPACTS

Responses to the following questions and related discussion indicate whether or not the proposed project would have or would potentially have a significant adverse impact on the environment, either individually or cumulatively with other projects. All phases of project planning, implementation, and operation are considered. Mandatory Findings of Significance are located in Section XXI below.

I. AESTHETICS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				**X**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**
c) In non-urban areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			**X**	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

ENVIRONMENTAL SETTING

The primary scenic resource within Merced County is the rural and agricultural landscape of non-urbanized areas of the county. The project site is currently in agricultural use (agricultural crops and an existing dairy), and is surrounded by agricultural uses and associated residences. Due to the relatively flat topography, short- and mid-range views are limited to agricultural uses, including pasture, row crops, and orchards. Long-range views feature the Coastal ranges. (Merced County 2013)

The site appearance is one of a developed animal confinement facility within a rural, agricultural setting. Viewers outside the project site are limited to motorists on perimeter roadways and residents of surrounding agricultural facilities and operations. Neither the project site nor the views to or from the site have been designated as an important scenic resource by Merced County or any other public agency. No locally designated scenic highway has been identified in the vicinity of the project area (Merced County 2013). The nearest State designated scenic highway is Interstate 5, located approximately 8.75 miles west of the project site (CA DOT 2021).

ENVIRONMENTAL EVALUATION

Question (a) Scenic vista: No Impact. Given the lack of distinctive topographical features in the project vicinity, the project site is not located in an area with scenic vistas. The agricultural-related facilities and associated residences in the vicinity are existing uses, and are considered common to the area. No designated scenic vista is visible from the project site, nor is the site visible from any nearby scenic vista. The dairy facility is an existing use, and would be considered common to the area. The proposed project would be an expansion of that existing use. Because the proposed dairy expansion would not affect a scenic vista, no impact would result with implementation of the project, and no mitigation would be required.

Question (b) Scenic resources: No Impact. No state- or locally-designated scenic highway is visible from the project site, nor is the site visible from any nearby designated scenic highway. The nearest designated State Scenic Highway is the section of Interstate 5 that runs south into Merced County just north of Newman, approximately 8.75 miles to the west of the project site. Because the

project site is not located within the viewshed of a designated scenic highway, there would be no damage to scenic resources within a scenic highway. No impact would result with implementation of the dairy expansion project, and no mitigation would be required.

Question (c) Visual character: Less-than-significant Impact. Developed agricultural uses in the vicinity range from irrigated cropland to animal confinement facilities. Though the existing dairy facilities are visible from perimeter roads and nearby recreation areas, their appearance is a common sight in rural areas of Merced County, and the visual effects of the animal confinement facilities are reasonable and expected in the context of the County's Agricultural land use designation. The proposed expanded dairy facilities would appear similar to existing uses on the project site and in the project area, and would continue to be considered common and appropriate to the region by most viewers. Since the proposed project is consistent with the existing and planned agricultural uses of the area, implementation of the project would not degrade the existing visual character of the site or surroundings. This would be a less-than-significant impact, and no mitigation would be required.

Question (d) New source of light or glare: Less-than-significant Impact. Existing night lighting in the area of active dairy facilities includes building-mounted light on animal housing structures and the milking parlor. Pole mounted yard lights also exist at some locations. Some existing lighting would be eliminated with removal of the existing shade barn, shop, hospital milking parlor, and freestall barn; the proposed dairy expansion includes new building-mounted lighting on the proposed structures. While there are residences in the vicinty of active dairy operations, which are considered sensitive receptors for nighttime light and glare, County standards require that all lighting be directed away from or be properly shaded to eliminate light trespass or glare within a project or onto surrounding properties. Since any new lighting would be installed in compliance with County standards, the project would not create a new source of light or glare which would adversely affect day or nighttime views in the area, and no mitigation would be required.

II. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			**X**	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined in Public Resources Code section 51104(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

ENVIRONMENTAL SETTING

The existing Borba Dairy Farms facility consists of an active dairy facility and associated cropland surrounded by similar agricultural uses and associated residences. The project site and surrounding area is designated Agricultural by the 2030 Merced County General Plan and is zoned A-1 (General Agricultural). The proposed project is situated on parcels that are subject to a Williamson Act Contract (Merced County 2021). Construction of the proposed facilities would result in the conversion of approximately 24.2 acres of cropland to active dairy facilities.

According to the California Department of Conservation's (DOC) Important Farmlands Map[1] of Merced County, the area of existing active dairy facilities is designated as Confined Animal Agriculture and Farmland of Statewide Importance (DOC 2016). As defined by the DOC, the Confined Animal Agriculture designation includes poultry facilities, feedlots, dairy facilities, and fish farms; Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. The area of the proposed retention ponds is designated as Unique Farmland, and the area of the proposed storage barn is designated as Prime Farmland.

The Natural Resources Conservation Service (NRCS) provides agricultural ratings for soils in the project area in the Merced County Soil Survey. The area of existing active dairy facilities and the site of the proposed storage barn are designated by the NRCS as Prime Farmland if Irrigated. The site of the proposed retention ponds is designated as Not Prime Farmland. (NRCS 2021). For a discussion of project site soil properties, Section VII, *Geology and Soils*.

[1] The Important Farmland Map uses a classification system that combines technical soil ratings from the Natural Resources Conservation Service digital soil data and current land use. The minimum land use mapping unit is 10 acres unless specified.

There are no forest lands, timberland, or timberland zoned Timberland Production in Merced County (CDFW 2015).

ENVIRONMENTAL EVALUATION

Question (a) Convert farmland to non-agricultural use: Less-than-significant Impact. The area of existing dairy facilities and the site of the proposed storage barn are located on land that is classified by the NRCS as Prime Farmland if Irrigated. The site of the proposed retention ponds is designated as Not Prime Farmland. The project area is designated for agricultural use by the 2030 Merced County General Plan. As a result of project construction, approximately 14.2 acres of existing cropland designated as Not Prime Farmland would be converted to new retention ponds. Approximately 8 acres of existing cropland designated as Prime Farmland if Irrigated would be converted for construction of the storage barn; an additional 2 acres would converted to active dairy facilities. The proposed dairy expansion would represent a continuation of existing agricultural uses, and no conversion of agricultural soils to non-agricultural uses would occur. Because the project site would be maintained in agricultural use, and because construction of the proposed facilities would not convert Prime Farmland, Unique Farmland, or Farmland of statewide importance to a non-agricultural use, a less-than-significant impact would result. No mitigation would be required.

Question (b) Conflict with zoning for agricultural use: Less-than-significant Impact. The 2030 Merced County General Plan and Zoning Ordinance designate the project area predominantly for agricultural uses. The project site is under a Williamson Act Contract. The existing use, a dairy, is an agricultural use consistent with the General Plan and Zoning Ordinance. Adjacent properties also include agricultural uses, primarily field crops. No feature of the proposed dairy expansion project would preclude or limit the agricultural use of adjoining parcels. Thus, the proposed project would permit the continuation of existing agricultural uses consistent with County policies, and would not conflict with adjacent agricultural and/or non-agricultural uses. A less-than-significant impact would result, and no mitigation would be required. For a discussion of project compatibility with adjacent residential uses, see Section XI, *Land Use and Planning* of this Initial Study.

Question (c) through (e) Conflict with zoning for or loss of farmland, forest land, or timber land: No Impact. The project site is not zoned for forest land or timberland, and there are no forest or timber resources located on the project site. Thus, there would be no loss of forest land or conversion of forest land to non-forest use. The proposed facilities would not result in any change to the existing environment that could result in the conversion of farmland to non-agricultural use. Because the proposed project would not conflict with any existing forest land or timberland production zoning, and no changes associated with the project are proposed that would result in the conversion of existing farmland, forest land, or timber lands, no impact would occur. No mitigation would be required.

III. AIR QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	**X**			
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	**X**			
c) Expose sensitive receptors to substantial pollutant concentrations?	**X**			
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	**X**			

Question (a) through (d) Air Quality Impacts: Potentially Significant Impact. The proposed dairy expansion is anticipated to have potentially significant impacts from the following air emission sources that will be evaluated further in the EIR: construction-related emissions of reactive organic gases, nitrogen oxides and fugitive dust; operation-related emissions of carbon monoxide, ozone precursors, fugitive dust, and hazardous pollutants; and odors from project operations. An Air Quality Impact Assessment, including a Health Risk Assessment and an Ambient Air Quality Analysis (should it be required), will be prepared and will address emissions from: criteria pollutants; hydrogen sulfide, ammonia; particulate matter and its toxic components (e.g., aluminum, lead, manganese, nickel, etc.); and xylenes, formaldehydes, and carbon tetrachloride from Volatile Organic Compounds. The EIR will also address past and recent air quality violations, as applicable.

Naturally Occurring Asbestos

Naturally occurring asbestos is not a potential concern in the project area (USGS 2011). For more information, see Section IX, *Hazards and Hazardous Materials*.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	**X**			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	**X**			
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	**X**			
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site?	**X**			
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**X**			
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**X**			

Question (a) through (f) Biological Resource Impacts: Potentially Significant Impact. Construction of the proposed facilities and increased activities as a result of the proposed dairy expansion could result in impacts to special-status species and migratory birds. These would be potentially significant impacts that will be evaluated further in the EIR. A reconnaissance-level biological survey of the project site will be conducted to assess existing biological conditions and potential impacts.

V. CULTURAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	**X**			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	**X**			
c) Disturb any human remains, including those interred outside of formal cemeteries?	**X**			

Question (a) through (d) Cultural Resource Impacts: Potentially Significant Impact. Cultural Resources investigations show that Native American tribes have historically established communities near rivers and streams in Merced County. The project site is located approximately 0.5 miles north of the Merced River and approximately 0.5 miles east of the San Joaquin River (Google Earth 2021). From the perspective of prehistoric Native Americans, the area was an integral part of the greater San Joaquin River resource exploitation zone, and thus could have been visited or occupied seasonally or occasionally by various Native American tribes.

Implementation of the proposed project may result in site clearing, grading, and other ground disturbing activities that could adversely affect cultural resources. Significant cultural remains can also exist below the plow zone in Merced County, and construction activities in these undeveloped areas could unearth and potentially damage cultural resources. This would be a potentially significant impact that will be evaluated further in the EIR. A reconnaissance-level cultural resources survey of the project site will be conducted to determine existing archaeological and historical resource conditions and potential impacts.

VI. ENERGY	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	**X**			
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	**X**			

Question (a) and (b) Impacts to Energy Efficiency: Potentially Significant Impact. Development of the proposed dairy facility expansion would entail energy consumption that includes both direct and indirect expenditures of energy. The proposed dairy expansion is anticipated to have potentially significant impacts related to energy efficiency that will be evaluated further in the EIR for this project.

VII. GEOLOGY AND SOILS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?				**X**
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?				**X**
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			**X**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			**X**	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			**X**	

ENVIRONMENTAL SETTING

Geology

The Borba Dairy Farms Expansion project site is located within the Great Central Valley of California. The Central Valley is composed primarily of alluvial deposits from erosion of the Sierra Nevada located to the east and of the Coastal Ranges located to the west. The elevation of the project site is approximately 70 to 75 feet above mean sea level (MSL). The topography of the project site is generally flat, with varying agricultural field elevations and directional slope.

Soils

The Natural Resources Conservation Service provides agricultural ratings for soils in the project area in the Merced County Soil Survey. Predominant soils in the proposed project area as classified by the NRCS are shown in Table 6 below.

Table 6 Soil Types within the Borba Dairy Farms Project Site		
Soil Type	**Acres**	**Site Limitations**
Active Dairy Facilities		
Grangeville loam, 0 to 1 percent slopes	31.7	Flooding, Depth to saturated zone
Hanford fine sandy loam, 0 to 1 percent slopes	24,5	Flooding
Pachappa fine sandy loam, deep over hardpan, 0 to 1 percent slopes	6.1	Flooding
Grangeville loam, slightly saline-alkali, 0 to 1 percent slopes	2.6	Flooding, Depth to saturated zone
Storage Barn		
Dinuba sandy loam, 0 to 1 percent slopes	0.6	Not limited
Retention Ponds		
Waukena fine sandy loam, moderately saline-alkali, 0 to 1 percent	15.7	Flooding, shrink-swell
Waukena fine sandy loam, slightly saline-alkali, 0 to 1 percent slopes	0.1	Flooding, shrink-swell
Source: National Resources Conservation Service, Web Soil Survey, 2021.		

Soil properties can also influence the development of building sites, including site selection, structural design, construction, performance after construction, and maintenance. Soil properties that affect the load-supporting capacity of an area include depth to groundwater, ponding, subsidence, shrink-swell potential, and compressibility. The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments. The project site is comprised of soils that have limitations for development that include flooding, shrink-swell potential, and depth to saturated zone. (NRCS 2021)

Faults and Seismicity

The project site is not located within a mapped fault zone or landslide and liquefaction zone (DOC 2015; Merced County 2013a). There is no record or evidence of faulting on the project site. The site is located in Seismic Damage Zone III, indicating a high severity level with major probable damage in the event of severe seismic activity (Merced County 2013b).

REGULATORY SETTING

Merced County regulates the effects of soils and geological constraints on urban development primarily through enforcement of the California Building Code (CBC), which requires the implementation of engineering solutions for constraints to urban development posed by slopes, soils, and geology.

ENVIRONMENTAL EVALUATION

Question (a.i) Earthquake fault: No Impact. The project site is not located within a mapped earthquake fault, and there is no record or evidence of faulting on the project site (Merced County 2013b; DOC 2015). Because no fault traces underlie the project site, no hazardous conditions would result from implementation of the project. There would be no impact.

Question (a.ii) Ground shaking: Less-than-significant Impact. As noted above, the project site is located in Seismic Damage Zone III (Merced County 2013b). Should an earthquake occur in the vicinity of the proposed project site, it could result in major damage. Dairies are categorized as a low

risk use that is considered suitable in all ground-shaking zones. However, Merced County requires that all new construction comply with the seismic safety requirements of the CBC. Compliance with the CBC would reduce risks on the project site from seismic ground shaking to levels considered acceptable for the State and region. This would be a less-than-significant impact, and no mitigation is required beyond compliance with adopted building standards.

Question (a.iii) Ground failure, liquefaction: Less-than-significant Impact. The project site is not located within a mapped liquefaction zone (DOC 2015). The proposed project would employ standard construction practices and comply with CBC requirements for the State of California. Standard design, construction, and safety procedures would limit soil liquefaction hazards to levels deemed acceptable in the state and region. Adherence with adopted building standards would avoid substantial adverse effects due to the risk of loss, injury, or death involving liquefaction or other seismic-related ground failure. This would be a less-than-significant impact, and no mitigation is required.

Question (a.iv) Landslides: No Impact. The project site is generally flat and is not located near steep slopes with unstable soils that may be susceptible to landslides. Also, the greater project area is not noted for unstable geologic formations susceptible to landslides (DOC 2015). Therefore, the project would not be exposed to potential geologic hazards, including the risk of loss, injury, or death involving a landslide. There would be no impact.

Question (b) Soil erosion: Less-than-significant Impact. Construction of the proposed dairy expansion facilities would occur in the area of existing dairy facilities and existing agricultural fields that have been previously graded. While implementation of the proposed project could result in temporary soil erosion and the loss of top soil due to construction activities, the location where the proposed dairy facilities and retention ponds would be constructed is generally level from previous grading. Minimal modification to the site's existing topography or ground surface relief would be required. Also, the erosion potential for proposed project site soils is not rated (NRCS 2021), meaning little or no erosion is likely. This would be a less-than-significant impact, and no mitigation would be required. For a discussion of potential significant effects due to sedimentation during the construction period of the project, see Section X, *Hydrology and Water Quality*.

Question (c) Unstable geologic unit: Less-than-significant Impact. Construction of the expanded dairy facilities and retention ponds could increase loads on the project site that could cause soil settlement. The project area is not noted for unstable geologic formations susceptible to landslide or ground failure, nor is the project area noted for subsidence[2] (Merced County 2013c; NRCS 2021). The topography surrounding the active dairy facilities and agricultural field elevations is generally level. Any potential effects from unstable or expansive soils would be minimized through compliance with the Merced County and CBC building standards and additional corrective engineering measures that would be required to be documented during the building permit process, including the submittal of a soils report. For these reasons, the proposed dairy expansion project would not result in soil instability and subsequent landslide, lateral spreading, liquefaction, or collapse. This would be a less-than-significant impact, and no mitigation would be necessary.

[2] Subsidence is the settling or sinking of land. In Merced County, this is generally resulting from groundwater extraction and drawing down of the groundwater table.

Question (d) Expansive soil: Less-than-significant Impact. Expansive soils are soils that shrink and swell in response to changes in moisture. These volume changes can result in damage over time to building foundations, roads, underground utilities, and other structures, if they are not designed and constructed appropriately to resist the changing soil conditions. The soils that comprise the proposed project site are limited for development by shrink-swell potential in the area of the proposed retention ponds (NRCS 2021). The Merced County building code requires a soils report for most non-residential structures within Merced County, and additional corrective engineering measures are required as part of the design for proposed facilities. Further, the proposed dairy expansion facilities would not be used for human habitation. Compliance with the CBC requirements and additional corrective engineering measures documented during the building permit process would reduce risks on the project site from expansive soils to levels considered acceptable for the State and region. This would be a less-than-significant impact, and no additional mitigation would be required beyond compliance with adopted standards and County requirements.

Question (e) Soils adequately support septic system: Less-than-significant Impact. On the Borba Dairy Farms project site, there are individual septic systems that serve the on-site residence and dairy facilities. No new septic systems are included in the proposed project. The installation or modification of any future on-site septic system would require compliance with Merced County performance standards and approval by the DEH (Chapter 18.40, Performance Standards). These standards would require that the septic system be properly sized and designed with respect to on-site soil capabilities that would ensure the safe treatment and disposal of wastewater and the maintenance of groundwater quality. Because the proposed project does not include modifications to existing septic systems, and no new septic systems are proposed, compliance with State and Merced County performance standards and permit conditions would minimize any potential impacts. This would be a less-than-significant impact, and no mitigation would be necessary.

Question (f) Paleontological resource / unique geologic feature: Less-than-significant Impact. According to available information, the project site is not located in an area known to have produced significant paleontological resources (UCMP 2021), nor are there any unique geologic features. Therefore, project construction would not result in the destruction or degradation of paleontological resources or unique geological features. This would be a less-than-significant impact, and no mitigation would be required.

VIII. GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	**X**			
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	**X**			

Question (a) and (b) Greenhouse gas emissions: Potentially Significant Impact. Construction and operation of the dairy expansion project would result in greenhouse gas emissions from direct and indirect sources. The proposed dairy expansion is anticipated to have potentially significant impacts from greenhouse gases (including methane) that will be evaluated further in the EIR for this project.

IX. HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				**X**
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				**X**
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				**X**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				**X**
h) Create significant nuisance conditions to the public or the environment through the generation of insects due to project operations?	**X**			

ENVIRONMENTAL SETTING

Animal agriculture, such as a dairy, results in the production of copious amounts of manure. Animal wastes contain zoonotic pathogens, which are viruses, bacteria, and parasites of animal origin that cause disease in humans.

Standard dairy chemicals are used at the facility. The Borba Dairy Farms uses a weekly pest control service. In the winter, in addition to the regular pest control, gnats that target fly larvae are released at the dairy site as a biological control. There is a permitted agricultural gasoline dispensing operation with an aboveground, 500-gallon storage tank and fueling point on site. There is one permitted emergency diesel generator on site. Hazardous materials used in dairy operations are stored in the milking parlor, the shop, and at the fuel storage area near the existing wastewater ponds. A Hazardous Materials Business Plan has been filed with Merced Division of Environmental Health (DEH) and was accepted on December 8, 2020.

There are no schools located within one-quarter mile of the proposed project site. The nearest school, Hilmar Middle School, is located approximately 6 miles east-northeast of the project site (Google Earth 2021).

According to the records search of federal, state, and local environmental databases (pursuant to Government Code Section 65962.5), the project site does not contain any history of hazardous site contamination by hazardous substances (CA DTSC 2021).

The Gustine Municipal Airport lies approximately 7.5 miles south of the proposed project site; Ahlem Farms Airport, a private aircraft landing strip, is located approximately 2.4 miles to the northeast (tollfreeairline.com 2021). The project site is not located within any Airport Influence Area as indicated in the Merced County Airport Land Use Compatibility Plan (Merced County ALUC 2012). According to the 2030 Merced County Emergency Operations Plan, freeways and major county roads, including those in the vicinity of the project site, would be used as primary evacuation routes in the event of a natural hazard, technological hazard, or domestic security threat.

According to California Fire and Resource Management Program Fire Hazard Severity Zone map, the proposed project area is within the Local Responsibility Area (LRA), with an Unzoned designation. The threat of wildfire hazard in that area is determined to be unlikely (CAL FIRE 2007).

The proposed project site is not in an area identified by the California Geological Survey as having soils that are likely to contain naturally occurring asbestos (USGS 2011). Therefore, no naturally occurring asbestos is expected in on-site soils that could be disturbed during construction; this issue will not be discussed further.

REGULATORY SETTING

Both federal and state laws include provisions for the safe handling of hazardous substances. The federal Occupational Safety and Health Administration (OSHA) administers requirements to ensure worker safety. Construction activity must also be in compliance with the California Occupational Safety and Health Administration regulations.

The Merced County Division of Environmental Health (DEH) is the lead agency for the enforcement of State Hazardous Waste Control laws and regulations. The DEH maintains standards and guidelines relating to the proper handling and storage of hazardous materials. Facilities that handle and store considerable amounts of hazardous materials (55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gas) are required to implement a Hazardous Materials Business Plan. The HMBP must include the following: an inventory of all hazardous materials handled at the facility, floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures. The DEH also maintains minimum design standards relating to the operation and maintenance of on-site septic systems.

ENVIRONMENTAL EVALUATION

Question (a) and (b) Use and/or accident conditions related to hazardous materials: Less-than-significant Impact. Construction of the proposed project would include the use, storage, transport, and disposal of oil, diesel fuel, paints, solvents, and other hazardous materials. If spilled, these substances could pose a risk to the environment and to human health. Both federal and state laws include provisions for the safe handling of hazardous substances. According to federal health and safety standards, applicable federal OSHA requirements would be in place to ensure worker

safety. Construction activity must also be in compliance with the California Occupational Safety and Health Administration regulations (Occupational Safety and Health Act of 1970).

Nutrient-rich process water would continue to be used to fertilize on-site crops, thereby precluding the need for large amounts of chemical fertilizers, and minimizing the potential risk of release within the project area and region. Similarly, dry manure would continue to be accumulated on-site, and then exported and applied to off-site fields not owned by the dairy operator as fertilizer and soil amendments in place of chemical fertilizers.

Previous evaluations of animal confinement facility operations conducted by Merced County (Merced County Animal Confinement Ordinance Revision DEIR, February 2002; Vander Woude Dairy FEIR Staff Presentation to Planning Commission, March 30, 2004) indicate that the following activities and operations at dairies would not result in the release of hazardous substances to the environment:

Potential Source	Explanation	Information Source
Supplements in cattle feed	No complete exposure pathways	Animal Confinement Ordinance DEIR, February 2002, pps. 5-141 to 5-145
Genetically modified crops (grown as forage for dairy animals)	Cattle digestive process breaks down components in feeds, including protein into amino acids, and DNA into nucleic acids, that are then excreted; Unpublished research indicates no adverse effects on dung beetles from ingesting manure from cows feeding on Bt corn; Incomplete exposure pathway **GENETICALLY MODIFIED CROPS ARE GROWN AT THE PROJECT SITE**	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25
Recombinant Bovine Growth Hormone	bST is a complex protein that is immediately broken down into small, inactive amino acids and peptides and rendered ineffective when it enters a cows digestive system; Incomplete exposure pathway **NOT USED AT THE DAIRY**	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25
Antibiotics	Use of antibiotics is prohibited for the milking herd **SICK ANIMALS ARE SEPARATED FROM THE HERD**	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25

No proposed operation or facility of the Borba Dairy Farms would alter the results of these previous evaluations regarding the release of hazardous substances to the environment from dairy operations.

Both construction and operation activities must be in compliance with the California OSHA regulations. The dairy facility uses and stores diesel fuel, motor oil, hydraulic oil, and other petroleum products associated with the operation of heavy equipment. The dairy facility also uses and stores cleaning and maintenance materials that may be categorized as hazardous. The types and quantities of these materials are documented in the HMBP prepared for this facility and filed with DEH. Any updates to the HMBP will need to be filed with DEH. Compliance with California

OSHA requirements and the requirements of the HMBP would reduce the risk of hazards related to the routine transport, use, or disposal of hazardous materials to a less-than-significant level. The risk of hazards to the public or to environmental conditions related to accident conditions would also be reduced to a less-than-significant level.

The proposed project includes the demolition of four structures on the project site; these structures could contain lead-based paint or asbestos. Lead-based paint has been banned for many uses since 1978; asbestos has been banned for many uses since 1989. The Borba Dairy Farm structures were permitted by Merced County in 1994, and constructed thereafter. Additionally, the demolition of any structure which could include lead-based paint or asbestos would require a permit from both the local Air Pollution Control District and Merced County. Because the existing structures were constructed after the sunset dates for lead-based paint and asbestos, and demolition of the structures would require permits from both the local APCD and Merced County, compliance with the requirements of the permits would reduce this potential impact to a less-than-significant level.

For a discussion of impacts to water quality as a result of increased export of dry manure and associated pathogens and residual contaminants, see Section X, *Hydrology and Water Quality*.

Because the routine transport, use, and disposal of these materials are subject to local, state, and federal regulations, this impact would be considered less than significant. The risk of hazards to the public or to environmental conditions related to accident conditions would also be reduced to a less-than-significant level, and no mitigation would be required.

The following Department of Toxic Substances Control (DTSC) standard recommendations for analysis would not apply to the proposed dairy expansion project: (1) since the project does not propose intrusive activities in the roadway, there would be no potential for disturbance of aerially deposited lead from tailpipe emissions; (2) the project site has not been used or suspected to having been used for mining activities, and no on-site mine waste is anticipated; (3) while there would be approximately 8,000 cubic yards of dirt imported for fill, the proposed dairy project would not result in sensitive land uses, there would be no risk to sensitive uses from contaminated soils; and (4) while the project site has been used for agricultural activities, the DTSC guidance for proper investigation of organochlorinated pesticides applies to proposed new and expanded school sites or other projects where new land use could result in increased human exposure, especially residential use. Therefore, these issues would not apply to the Borba Dairy Farms Expansion project, and no further analysis would be necessary. Additional DTSC standard recommendations are addressed in this Hazards and Hazardous Materials analysis.

Question (c) Hazardous emissions or materials near a school: No Impact. The nearest school to the animal confinement facilities, Hilmar Middle School, is located approximately 6 miles east-northeast of the project site. Therefore, the proposed dairy expansion would not result in hazardous emissions or handle hazardous waste within 0.25 miles of an existing or proposed school, and no impact would result.

Question (d) Included on list of hazardous materials sites: No Impact. According to queries of the GeoTracker and Envirostor Data Management Systems, the dairy expansion project site would not be located on a site identified on a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5 (CA DTSC 2021). Therefore, implementation of the

project would not create a significant hazard to the public or the environment. No impact would result, and no mitigation would be required.

Question (e) Safety hazard or excessive noise near airports: No Impact. There are no existing public airports within two miles of the proposed project site; the Gustine Municipal Airport is the closest public airport, located approximately 7.5 miles south of the project. Ahlem Farms Airport, a private airstrip, is located approximately 2.4 miles to the northeast of the project area. Because the project site is not located within an area regulated by an airport land use plan, and agricultural uses are considered compatible uses with private airfield operations, the project would not result in a safety hazard or excessive noise for people residing or working in the project area due to aircraft over-flight. There would be no impact, and no mitigation would be required.

For an analysis of the potential noise effects related to construction and operation of the proposed project, see Section XIII, *Noise*.

Question (f) Impair or interfere with an adopted emergency response/evacuation plan: Less-than-significant Impact. The project site is located on the west side of Kelley Road and south of Turner Road in the Hilmar area of the County. State Route (SR) 165 to the east, SR 140 to the south, and SR 33 to the west provide regional access to the site. Freeways and major county roads would be used as primary evacuation routes in the event of emergency. The proposed project is located on Kelley Road, a major collector road as designated on the County's Circulation Diagram. Arterial roadways are used as evacuation routes; the nearest designated arterial roadway is Bloss Avenue to the north, leading to SR 165 to the east (Merced County 2013d). The proposed project does not include any modification of existing area roadways or intersections, and the project would not add significant amounts of traffic that would interfere with emergency response or evacuation. Therefore, the proposed project would result in a less-than-significant impact, and no mitigation would be required.

Question (g) Exposure to risk involving wildland fires: No Impact. The Fire Hazard Severity Zone map for Merced County indicates that the project site and surrounding area is located in the Non-Wildland / Non-Urban Severity Zone (Merced County 2013e). The project site is designated as a Local Responsibility Area – Unzoned in an area not considered a fire risk (CAL FIRE 2007). Therefore, no hazard would occur related to risk of loss, injury, or death due to wildland fire with implementation of the proposed project. There would be no impact, and no mitigation would be required.

Question (h) Nuisance Insects: Potentially Significant Impact. While the existing agricultural character of the project vicinity tends to minimize incompatibility to existing uses, implementation of the Borba Dairy Farms Expansion project could introduce an additional source of flies and other insects in the area of the adjacent residences. In efforts to minimize agricultural nuisances, there is a required minimum setback between new or expanded confined animal facilities and individual off-site rural residences to 1,000 feet, and the construction of new off-site dwellings is prohibited within 1,000 feet of an existing animal confinement facility. For the Borba Dairy Farms Expansion project, the closest off-site residence is located approximately 1,025 feet east-southeast of active animal facilities near the southeastern corner of the project site (see Figure 9). Because of the proximity of adjacent residences, and because expanded operations at the dairy could result in an increase in nuisance intensity and frequency, the proposed project may be incompatible with existing uses in the project vicinity. This would be a potentially significant impact, and will be evaluated further in the EIR for this project.

X. HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	**X**			
b) Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	**X**			
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;	**X**			
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	**X**			
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	**X**			
(iv) impede or redirect flood flows?	**X**			
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	**X**			
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	**X**			

Question (a), (e), and (f) Impacts to water quality: Potentially Significant Impact. Dairy facilities pose a number of potential risks to water quality, primarily related to the amount of manure and process water that they generate. Manure and process water from dairy facilities can contribute pollutants such as nutrients (nitrogen), ammonia, organic matter, sediments, pathogens, hormones, antibiotics, and total dissolved solids (salts). These pollutants, if uncontrolled, can cause several types of water quality impacts, including contamination of drinking water, impairment of irrigation systems, and impairment of surface waters. While the existing and proposed waste management systems would act to prevent groundwater contamination, the operation of the Borba Dairy Farms Expansion project may result in degradation of groundwater resources and potential adverse effects to surface water quality. In addition, increased solid manure exports to off-site fields associated with the proposed dairy expansion could result in off-site impacts to water quality. These potentially significant impacts will be evaluated further in the EIR for the proposed project. The EIR will include a water quality characterization and impacts analysis based on water quality data available from both on-site and nearby wells, and nearby water wells.

Question (b) Decrease groundwater supplies: Potentially Significant Impact. Groundwater from on-site irrigation wells, an on-site river pump, and TID canal surface water resources currently provide water used for the dairy operation. The proposed expansion project includes the continued use of existing water resources. Water usage for the dairy could increase with the proposed dairy expansion. Project impacts to groundwater levels will be evaluated further in the EIR for the proposed project.

Question (c) Substantially alter the existing drainage pattern: Potentially Significant Impact. The project involves the construction of additional dairy facilities both within the footprint of the existing facility, and within over 24 acres of cropped areas surrounding the dairy facility. Stormwater runoff during the construction period could result in erosion, siltation, and sedimentation of waterways draining the site. Project impacts due to surface drainage and runoff during construction will be evaluated further in the EIR for the proposed project.

Question (d) Flood hazard, tsunami, or seiche zones: Potentially Significant Impact. Because the project site is located distant from the sea or any large reservoir, the project would not be located in an area subject to inundation hazards from seiche or tsunami. The Federal Emergency Management Agency provides information on flood hazards for communities based on its Flood Insurance Rate Maps. According to FEMA (2008), the project site is located within Flood Zone A, which is defined as an area subject to inundation by the 100-year storm, or 1-percent chance of occurring in any given year, but for which a Base Flood Elevation has not been established. Dairies located within flood hazard zones could be damaged by floodwaters or be required to shut down for extended periods. Flood waters could mingle with wet or dry manure storage areas at the facilities, cause releases of process water from ponds, and/or come into contact with freshly applied manure on fields, impacting surface water quality. Project impacts due to flooding on or off site as a result of project implementation will be evaluated further in the EIR for the proposed project.

XI. LAND USE AND PLANNING	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				**X**
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	**X**			

Question (a) Divide an established community: No Impact. The land surrounding the project site and in the vicinity is primarily developed for agriculture. Scattered rural residences are located in the general area of the project; most are associated with agricultural operations. Other than scattered rural residences, there is no established community in the project area. Because the project could not divide a community, no adverse effects would result, and no mitigation would be necessary.

Question (b) Land use conflicts: Potentially Significant Impact. Existing land uses on the project site include an existing dairy facility and irrigated cropland. There is one off-site residence located within the windshed of the dairy, approximately 1,025 feet southeast of active animal facilities (see Figure 6). While the existing agricultural character of the vicinity would tend to minimize incompatibility to existing uses in the project vicinity, implementation of the dairy expansion project could introduce an additional source of odors, flies, and other insects in the area of these residences. Because of the proximity of the adjacent residence, the proposed project may be incompatible with existing uses in the project vicinity. This would be a potentially significant impact to be evaluated further in the EIR.

XII. MINERAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

ENVIRONMENTAL SETTING

The majority of the land area of Merced County lies within the Central Valley physiographic province, which is dominated by significant amounts of overburden soils that are alluvial in nature. Less than 30 percent of Merced County lies in higher topographic areas, away from the alluvium and closer to bedrock conditions. Very few traditional hard rock mines exist in the county. There are no known areas with a high likelihood of known significant sand and gravel resources in the vicinity of the proposed project. (Merced County 2013f)

No significant Mineral Resource Zones or mineral resource production areas are located in or adjacent to the project area. The western portion of Merced County includes the following aggregate resource areas: Garzas Creek, Basalt Hill, Los Banos Valley, and Los Banos Creek Fan. According to the 2030 Merced County General Plan Background Report (Figure 8-10), the project site is not located in an area of sand and gravel resources (Merced County 2013f). The California Geological Survey indicates that the proposed project is not located within an Aggregate Production Area (CGS 2018).

ENVIRONMENTAL EVALUATION

Question (a) and (b) Loss of mineral resources of value and/or delineated on land use plans: No Impact. No important mineral deposits, significant Mineral Resource Zones, or existing or previous mines are located on the project site or in the surrounding area. Because there are no mineral resources or resource protection zones in the vicinity of the project site, there would be no loss of availability of known mineral resources. No adverse effect would result, and no mitigation would be required.

XIII. NOISE	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**	
b) Generation of excessive ground-borne vibration or ground-borne noise levels?			**X**	
c) For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			**X**	

ENVIRONMENTAL SETTING

Characteristics of Noise

Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent how humans are more sensitive to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise-sensitive receptor of concern.

Many ways are available to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each

other and are normally interchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Existing Noise Environment

The project site is located in an agricultural area with surrounding rural residential uses and agricultural operations. The primary existing noise sources in the project vicinity are residential sources, agricultural operations, and traffic on Kelley Road. Other than traffic noise, the predominant noise sources at the proposed project site are characterized as low-intensity residential and agricultural uses, consisting of noise from activities at surrounding residences and infrequent cultivation and harvesting.

Noise sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, churches, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds and parks are considered noise-sensitive uses. The noise level experienced at a sensitive receptor depends on the distance between the source and the receptor, the presence or absence of noise barriers and other shielding devices, and the amount of noise attenuation (lessening) provided by the intervening terrain. Existing sensitive land uses within the project area include single-family residences.

The Gustine Municipal Airport lies approximately 7.5 miles south of the proposed project site; Ahlem Farms Airport, a private aircraft landing strip, is located approximately 2.4 miles to the northeast (tollfreeairline.com 2021). The project site is not located within any Airport Influence Area as indicated in the Merced County Airport Land Use Compatibility Plan (Merced County ALUC 2012).

REGULATORY SETTING

The 2030 Merced County General Plan Noise Element provides a basis for local policies to control and abate environmental noise, and to protect the citizens of Merced County from excessive noise exposure (Merced County 2013). The County also enforces its Noise Ordinance (Chapter 10.60, *Noise Control*) in the County Code. This ordinance contains noise level standards for residential and non-residential land uses. Specifically, the County Code sets 65 dBA Ldn[3] and 75 dB Lmax[4] standards for residential property, with standards applicable to nonresidential properties 5 dB higher (Chapter 10.60.030 (A)). The County Code (Chapter 10.60.050(A)(2)) further exempts noise sources associated with agricultural activities or agricultural operations on agricultural property from sound level limitations.

According to County Code (Chapter 10.60.040(B)(5)), construction activities that include the operation of any tools or equipment used during construction, drilling, earth moving activities, excavating, or demolition are prohibited from 6:00 p.m. to 7:00 a.m. the following day on weekdays. They are also prohibited at any hour during weekend days or legal holidays, except for emergency work.

[3] Ldn = Day/night average sound level during 24-hour day weighted by a factor of three.

[4] Lmax: The highest root-mean-square (RMS) sound level measured over a given period of time.

ENVIRONMENTAL EVALUATION

Potential noise impacts can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project. Construction associated with the development of the project would increase noise levels temporarily during the construction of the proposed dairy expansion facilities. Operational noise associated with the proposed dairy facility would occur 24 hours per day, 365 days per year.

Question (a) Generate a noise increase in excess of local plan standards: Less-than-significant Impact.

Construction Noise

Construction of the Borba Dairy Farms Expansion project may result in a temporary increase in ambient noise levels. Construction of the proposed dairy facilities would occur in as many as six phases (one phase for each structure and one phase for the new ponds) and would take up to 10 years to complete. Construction activities would be considered an intermittent noise impact throughout the construction period of the project. These activities could result in various effects on sensitive receptors, depending on the presence of intervening barriers or other insulating materials. Most construction would take place within the existing facility footprint, while the proposed storage barn and retention ponds would be located within existing cropland areas.

Based on typical construction equipment noise emission levels (FHWA 2017), noise levels produced during construction could potentially exceed those determined to be acceptable for parcels not zoned for residential land use by the 2030 General Plan (80 dBA Lmax at the property line) (Merced County Code Section 18.40.050 (C)(3). However, Merced County Code Section 18.40.050 (E) acknowledges there may be temporary, elevated noise levels during construction. No feature of the project would cause noticeable levels of ground borne vibration or noise. Because construction activities would be temporary and would not likely result in noise levels that exceed General Plan standards for agricultural areas, construction noise would be considered to be a less-than-significant impact, and no mitigation would be required.

Operational Noise

Situated in a rural area removed from significant noise sources, the noise environment within the project site is dominated by traffic noise from trucks and vehicles on adjacent and private roadways, and operational noise from agricultural uses on the site and on adjacent farms. Existing operational noise is associated with on-site dairy operations, crop cultivation, and associated agricultural operations. Most noise events are associated with tractor and equipment operation. With project implementation, there would be little increase in existing ambient noise levels. No increases in noise from new large machinery or other noise-producing activities would occur, and no activities different from those currently occurring are proposed. However, some permanent increases associated with noise generated by additional vehicle and truck trips would occur. Generally, a doubling of traffic is necessary to result in a perceptible change in noise levels. Daily trips associated with the proposed project are estimated to increase from 62.0 average daily trips (ADT) to approximately 75.1 ADT. Since there is minimal traffic on Kelley Road, traffic noise would not exceed noise levels determined to be acceptable for agriculture by the Merced County General Plan, even with the addition of new dairy traffic. Also, noise levels in the vicinity of the project site would comply with the Merced County Code noise standard of 70 dB Ldn for agricultural uses (Merced

County Code Section 18.40.050 (C)(3)). This would be a less-than-significant impact, and no mitigation would be required.

Operation of the facility would not generate noise levels that would conflict with or exceed standards established by the Merced County General Plan Noise Element, Noise Ordinance, and Right-to-Farm Ordinance. This would be a less-than-significant impact, and no mitigation would be required.

Question (b) Ground-borne vibration or noise: Less-than-significant Impact. Construction activities associated with implementation of the proposed Borba Farms Dairy Expansion project are not expected to result in excessive groundborne vibration or groundborne noise levels. Additionally, any increases in groundborne vibration during construction activity would be temporary and would cease to occur after project construction is completed. No permanent noise sources that would generate excessive groundborne vibration or groundborne noise levels would be located or operated within the project area. Therefore, impacts would be less than significant, and no mitigation would be required.

Question (c) Excessive noise levels near airports: Less-than-Significant Impact. The Gustine Municipal Airport lies approximately 7.5 miles south of the proposed project site; Ahlem Farms Airport, a private aircraft landing strip, is located approximately 2.4 miles to the northeast. Because the project site is not located within any Airport Influence Area, and agricultural uses are considered compatible uses with private airfield operations, workers at the proposed project site would not be exposed to excessive noise levels. A less-than-significant impact would result, and no mitigation would be required.

XIV. POPULATION AND HOUSING	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			**X**	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

ENVIRONMENTAL EVALUATION

Question (a) Induce unplanned population growth: Less-than-significant Impact. The Borba Dairy Farms Expansion project site is located in a region developed with orchards, row crops, and other animal confinement operations, including other dairies. It would not result in a new or different type of use for the area, nor would the project create or improve any infrastructure serving the larger project area or region. The proposed project is consistent with Merced County land use plans, and no modification of land use and development policies would be necessary to accommodate the proposed dairy expansion project.

With implementation of the proposed project, the number of employees would remain at approximately 20 workers. In September 2021, the labor force in Merced County totaled 118,300 persons, with an official unemployment rate of 08.2 percent (or 9,800 unemployed persons) (EDD 2021). Any future increased labor needs of the project could be accommodated by this existing workforce within Merced County and would not require the importation of workers. Similarly, any additional housing demands caused by future project employees could be accommodated by existing and planned housing resources within Merced County.

The proposed project would not result in any meaningful increase in the County's population; implementation of the project would not result in the exceedance of population projections or result in any significant growth inducing effects. The proposed dairy expansion project would not be expected to result in substantial new growth in the project vicinity. Therefore, the proposed project would not result in substantial direct or indirect growth inducement, and no adverse impacts would occur. No mitigation would be required.

Question (b) Displace substantial numbers of people or housing: No Impact. There is one residence located at the Borba Dairy Farms facility. The proposed project would not impact the existing residence, and no new housing is proposed. There would be no impact to available housing units in Merced County. In July 2019, the last year for which data is available, there were 86,388 housing units available (US Census Bureau 2020). Implementation of the project would not displace substantial numbers of people or existing housing units. There would be no impact, and no mitigation would be required.

XV. PUBLIC SERVICES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives of any of the public services:				
a) Fire protection?			**X**	
b) Police protection?			**X**	
c) Schools?			**X**	
d) Parks?			**X**	
e) Other facilities?			**X**	

ENVIRONMENTAL SETTING

Public services provided in the project area include fire, police, hospital, school, library, and park services.

The Merced County Fire Department serves the unincorporated areas of Merced County. The Merced County Fire Department Station 95 is located at the corner of Falke Street and Lander Avenue/Highway 165 in Hilmar, approximately 6.5 miles east-northeast of the proposed project site. The Merced County Sheriff's Department provides police protection in the unincorporated areas of Merced County. Three hospitals provide medical services to county residents; Mercy General Hospital in Merced is nearest to the project site. The nearest school, Hilmar Middle School, is located approximately 6 miles east-northeast of the project site. Library services are available at the Irwin-Hilmar Public Library in Hilmar. The nearest park is Merced County's Hagaman Park, located approximately 3.5 miles southeast of the project site, in the community of Stevinson; park services are discussed in more detail in *Section XVI, Recreation.* Utility services are discussed in more detail in *Section XIX, Utilities and Service Systems.*

ENVIRONMENTAL EVALUATION

Question (a) through (e) New or physically altered governmental public service facilities: Less-than-significant Impact. Implementation of the proposed dairy expansion would include construction on the project site of new dairy housing, support buildings, and retention ponds. The project site is in an area with rural levels/standards of fire protection. In response to this common condition in agricultural areas of the county, the Merced County Fire Department generally imposes requirements for on-site water storage for fire protection and compliance with the following Fire Code measures:

1) Fuel Storage: The applicant shall provide information on on-site fuel storage, amounts, types of fuel and oil, storage container sizes, mobile/stationary, dispensing equipment, and Spill Prevention Control and Countermeasure (SPCC) documents.
2) On-Site Water: The applicant shall describe on-site water storage containment, amounts of water, whether Fire Department connections are in place, apparatus access to flush tank, or other onsite water. [California Fire Code (CFC) Sec. 507.1]
3) Fire Department Access: All driveways accessing the parcel shall be surfaced with an approved all weather driving surfacing material. The roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-

weather driving capabilities. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet except for approved security gates in accordance with Section 503.6 and an unobstructed vertical clearance of not less than 13 feet 6 inches. (CFC 503.2.1)

4) Address Identification: New and existing buildings shall have approved address numbers, building numbers, or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. (CFC 505.1)

Compliance with above standard measures would be required as conditions of approval, and would reduce fire risk and hazard to levels found acceptable by the Merced County Fire Department. Therefore, there would be no increase or change in the demand for fire service that would require the provision of new or physically altered fire facilities.

No feature of the project would result in the need for new or altered facilities for police protection, schools, parks, libraries, or health services. Because no new residences would be constructed, and no additional employees would be required, no substantial increase in population is expected to result from the proposed project. No feature of the proposed project would pose unusual police protection demands. Therefore, there would be no increase in the demand for public services such as police facilities, schools, parks, libraries, or health services that would require the construction of new facilities or physically altered facilities.

The proposed dairy expansion would continue to be served by heavy trucks (milk tankers, commodity deliveries), and other vehicles. Daily trips by all classes of vehicles would increase from an estimated 62.0 to 75.1 average daily trips, with an overall increase of 13.1 daily heavy truck trips (see Table 5 on page 23 of this Initial Study). The Merced County Department of Public Works, Road Division, has reviewed the proposed project and has identified the following conditions of approval:

1. The applicant shall enter a Roadway Impact Agreement with the Merced County Department of Public Works, Road Division to mitigate potential effects to roadway integrity from heavy truck traffic prior to issuance of a building permit. As part of the Agreement, a roadway impact evaluation shall be prepared to assess the potential impact that the project may have on Merced County roadways. The evaluation and/or agreement will determine an amount for the applicant to pay to the Merced County Road Fund to compensate the County for the increased cost of maintaining the County roadways impacted by the applicant's project.
2. The Merced Department of Public Works, Roads Division will require Right-of-Way Dedication by the applicant along Kelley Road fronting the property. Kelly Road has an existing 60-foot right-of-way, and the owners shall dedicate an additional 10 feet of right-of-way along the Kelley Road frontage of the property.

Implementation of these Conditions of Approval through the Merced County Community and Economic Development Department would result in a less-than-significant impact, and no additional mitigation would be required.

Because the project would not result require the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, the proposed project would result in a less-than-significant impact. No mitigation would be required.

XVI. RECREATION	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial deterioration of the facility would occur or be accelerated?				**X**
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				**X**

ENVIRONMENTAL SETTING

Merced County contains several federal, State, and county parks and recreation areas. Aside from parks in the county, there are many public open space areas as well.

- There are three National Wildlife Refuges located in Merced County: the Merced National Wildlife Refuge, the San Luis National Wildlife Refuge, and the San Joaquin River National Wildlife Refuge. The Borba Dairy Farms project site is located approximately 4.5 miles northwest of the San Luis National Wildlife Refuge. (USFWS 2021)
- The California Department of Fish and Game operates seven wildlife areas in Merced County. The West Hilmar Wildlife Area is located approximately two miles northwest of the proposed project site. (CDFW 2011).
- The State of California Department of Parks and Recreation operates six parks in Merced County. The nearest state park is George J. Hatfield State Recreation Area, approximately 0.5 miles to the southeast of the project site. (CDPR 2021).
- The Merced County Parks and Recreation Department maintains a variety of parklands throughout the county. County maintained parklands are divided into four basic classes: regional parks, community parks, dual-use parks, and neighborhood parks. There are a total of 21 parks owned and/or operated by Merced County. (Merced County 2013g)

ENVIRONMENTAL EVALUATION

Question (a) and (b) Increase park use, construct or expand recreational facilities: No Impact. While no existing public recreational facilities are located on the project site, there are several park and open space resources in the vicinity. Implementation of the project would not directly affect the provision or demand for any recreation. There would be no increase in the use of existing neighborhood or regional parks or other recreational facilities that would cause or accelerate the physical deterioration of such facilities. The proposed project does not include recreational facilities, nor does it require the construction or expansion of such facilities. Thus, no significant adverse impacts to recreation would occur with implementation of the proposed Borba Dairy Farms Expansion project, and no mitigation would be required.

XVII. TRANSPORTATION	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b) Would the project conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			**X**	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d) Result in inadequate emergency access?			**X**	

ENVIRONMENTAL SETTING

The Borba Dairy Farms Expansion project site is located in Merced County at 5297 Kelley Road. The community of Hilmar is located approximately 6.5 miles to the east-northeast of the existing active dairy facilities. The project area is dominated by agricultural uses.

Regional access to the project site is provided by Highway 165 to the east and SR 33 to the west. All trips currently access Kelley Road. Currently, heavy trucks (milk tankers, commodity deliveries) and other vehicles serve the project site. Existing daily trips by all classes of vehicles are estimated at 62.0 average daily trips (ADT), with approximately 17.7 heavy truck trips. For a discussion of potential impacts to roadways as a result of an increase in daily truck trips, see Section XV, *Public Services*, above.

ENVIRONMENTAL EVALUATION

Question (a) Conflict with local circulation plans: Less-than-significant Impact. The proposed project includes the construction of several new support buildings and wastewater retention ponds. Construction of the proposed project would be considered temporary over an approximate ten-year period. Employee trips and construction deliveries would be considered temporary construction traffic. Following implementation of the proposed project, project operations would result in an estimated increase of 13.1 heavy truck trips per day.

The proposed project use would be considered consistent with existing General Plan land use designation with issuance of Conditional Use Permit CUP20-014 (see Section XI, *Land Use and Planning* of this Initial Study). Because of the existing low levels of traffic in the vicinity, and because minimal new trips would be generated by the proposed project expansion, congestion on nearby roadways would not increase. There would be no reduction of the existing Levels of Service on nearby roads, nor would the project conflict with any applicable congestion management plan. Because there are no transit, bicycle, or pedestrian facilities in the vicinity of the proposed project, improvements would not result in the modification of any transit, bicycle, or pedestrian travel route. This would be a less-than-significant impact, and no mitigation would be required.

Question (b) Conflict with CEQA Guidelines regarding analysis of transportation impacts: Less-than-significant Impact. Section 15064.3, subdivision (b) of the CEQA Guidelines describes criteria for analyzing transportation impacts. The proposed dairy project would be served by heavy trucks (milk tankers, commodity deliveries), and other vehicles. Daily trips by all classes of vehicle are estimated to increase from an estimated 62.0 to 75.1 average daily trips, with an increase of 13.1 heavy truck trips per day. Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. As set forth in the Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018), "absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact". The advisory defines "vehicle miles traveled" as the amount and distance of automobile travel attributable to a project. Further, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. The project would generate no new car or light truck trips (see Table 5 on page 23 of this Initial Study). Therefore, the project would not meet the suggested screening threshold of 110 automobile trips. Because the project would be considered consistent with the Merced County General Plan, and the project would not generate a significant number of trips and associated vehicle miles traveled, a less-than-significant impact would occur, and no mitigation would be required.

Question (c) Increase hazards due to geometric design feature: Less-than-significant Impact. Following completion of construction, any roadway disturbance would be returned to its original condition. Implementation of the proposed project would not result in any permanent changes to the design features or uses of project roadways, or the construction of new roadways. There would be no increase to hazards related to a geometric design feature, or due to incompatible uses. A less-than-significant impact would result, and no mitigation would be required.

Question (d) Inadequate emergency access: Less than significant Impact. The Merced County Fire Department maintains standards for access roadways to provide for adequate emergency access. Construction effects on traffic and emergency circulation for the Borba Dairy Farms Expansion project would be temporary and well managed. Project implementation would not interrupt emergency access to the project site. Compliance with Merced County Fire Department standards for access roadways would result in a less-than-significant impact, and no additional mitigation would be required.

XVIII. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	**X**			
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	**X**			

ENVIRONMENTAL SETTING

Question (a) and (b) Cause adverse change to tribal cultural resources: Potentially Significant Impact. Implementation of the proposed project may result in site clearing, grading, and other ground disturbing activities that could adversely affect tribal cultural resources. Significant cultural remains can also exist below the plow zone in Merced County, and construction activities in these undeveloped areas could unearth and potentially damage tribal cultural resources. This would be a potentially significant impact that will be evaluated further in the EIR. A reconnaissance-level cultural resources survey of the project site will be conducted; it will include communication with the Native American Heritage Commission and local tribe representatives; however, because no tribes have registered with the County to request consultation on projects in their area, the County will not be offering formal tribal consultation in accordance with AB 52 at this time.

XIX. UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			**X**	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			**X**	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

ENVIRONMENTAL SETTING

There are five single-family residences located at the Borba Dairy Farms facility. Domestic water to the site and dairy barns is provided by four on-site water wells. Sewer service is provided by existing on-site septic systems. Solid waste collection and disposal are provided by private service.

The proposed dairy expansion would rely on existing utilities, including domestic water, septic systems, stormwater, electrical, gas, and telecommunication services. Based on the employment of approximately 20 employees, the Merced County Department of Public Health will not require a public water system permit.

ENVIRONMENTAL EVALUATION

Because confined animal facilities, including dairies, would not require additional public facilities beyond those typically provided in agricultural areas, implementation of the proposed dairy expansion project would not be expected to increase the demand for public facilities beyond the levels provided and planned for by public utilities.

Question (a) through (c) Construct or relocate new service system facilities, sufficient water supply, adequate wastewater treatment capacity: Less-than-significant Impact. Existing private water wells would continue to provide water to the project site. Based on the number of existing employees (20), with no additional employees required with implementation of the proposed project, the dairy operation would not be required to obtain a Public Water System Permit from the State of California State Water Resources Control Board, Division of Drinking Water. There would be no change or impact to community-based water supply systems.

On the Borba Dairy Farms project site, there are individual septic systems that serve the on-site residence and dairy facilities. No new septic systems are included in the proposed project. The installation or modification of any future on-site septic system would require compliance with Merced County performance standards and approval by the DEH (Chapter 18.40, Performance Standards). These standards would require that the septic system be properly sized and designed with respect to on-site soil capabilities that would ensure the safe treatment and disposal of wastewater and the maintenance of groundwater quality. For a discussion of dairy wastewater disposal and compliance with CVRWQCB requirements, see Section X, *Hydrology and Water Quality*.

Stormwater runoff from impervious surfaces and roofed areas would continue to be collected and routed to the wastewater pond, except for stormwater from several barns, which would continue to be routed to the Merced River. Wastewater would continue to be mixed with irrigation water and applied to the fields. The proposed project includes the construction of two new wastewater storage ponds as part of the on-site waste management system. According the Waste Management Plan provided by the applicant (dated 05/27/2020), existing and proposed facilities would provide sufficient storage capacity to manage additional stormwater resulting from an increase in impervious surfaces, as well as increased wastewater resulting from the proposed herd size increase. The proposed project would therefore be in compliance with Merced County's Stormwater Ordinance (County Code Chapter 9.53). Because no adverse effects to storm drainage are expected, and no needs for, or modifications to, public storm drainage systems in the project vicinity are necessary, this would be a less-than-significant impact. For more information regarding storm drainage, see Section X, *Hydrology and Water Resources*, above.

Based on the information above, implementation of the proposed dairy expansion project would not result in the relocation or construction of new or expanded water, wastewater, storm water drainage, electric power, natural gas, or telecommunications facilities. This would be a less-than-significant impact, and no mitigation would be required.

Question (d) and (e) Solid waste: Less-than-significant Impact. The proposed project consists of construction of expanded dairy facilities and wastewater retention ponds. The provision of solid waste collection service to serve the proposed project would be subject to the normal tariffs and requirements of the service provider, and would not result in the need for any major new systems or substantial alterations to these utility systems. It would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. There would be no change to existing conditions that would result in non-compliance with federal, state, and local management and reduction statutes and regulations related to solid waste. This would be a less-than-significant impact, and no mitigation would be required.

XX. WILDFIRE	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evaluation plan?				**X**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

According to California Fire and Resource Management Program Fire Hazard Severity Zone map, the proposed project area is within the Local Responsibility Area, with an Unzoned designation. The threat of wildfire hazard in that area is determined to be unlikely. (CAL FIRE 2007)

Question (a) through (d) Wildfire: No Impact. The project site in not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. It is located in an existing low-density agricultural area, and the threat of wildland fire has been determined to be unlikely (CAL FIRE 2007). Because the proposed project is not located in or near a State Responsibility Area nor on lands classified as very high fire hazard severity zones, no impact would occur and no mitigation would be required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		**X**		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)			**X**	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Question (a) Degrade quality of the environment, (b) Cumulatively considerable impacts: Potentially Significant Impact. As discussed in this Initial Study, the proposed Borba Dairy Farms Expansion project has the potential to impact air quality, biological resources, cultural and tribal cultural resources, energy efficiency, greenhouse gas emissions, hazards from nuisance insects, hydrology and water quality, and land use and planning. These would be potentially significant impacts to be evaluated further in the EIR for the Borba Dairy Farms Expansion project.

In addition, the proposed project may contribute to cumulative effects in these areas. The project has been determined not to have significant project level effects for any additional environmental issue. Therefore, implementation of the project would not contribute to any cumulative effects in these other areas. Because of potential cumulative impacts to the areas listed above, such impacts will be evaluated further in the EIR for the proposed project.

Question (c) Adversely affect human beings: Potentially Significant Impact. Because of the potential environmental impacts identified in this Initial Study, the proposed Borba Dairy Farms Expansion project may have the potential to cause substantial adverse effects on human beings. This would be a potentially significant impact to be evaluated further in the EIR for the proposed project.

3. PREPARERS OF THE INITIAL STUDY

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4. LITERATURE CITED

The following documents were referred to as information sources during preparation of this document. They are available for public review at the web addresses shown after the listing. All documents without an Internet address are available at the County of Merced, Community and Economic Development Department 2222 'M' Street, Merced, California 95340.

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DTSC. See California, State of. Department of Toxic Substances Control.

EDD. See California, State of. Employment Development Department.

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DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project applicant. A NEGATIVE DECLARATION will be prepared.

X I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date

05/17/2022

Cameron Christie, Planner I
Merced County
Community and Economic Development Department