1.1 Purpose of the Environmental Impact Report

The evaluation of projects to determine their effects on the environment is required by the California Environmental Quality Act (CEQA). When a project could have a significant effect on the environment, the agency with primary responsibility over the approval of the project (the lead agency) is required to prepare an Environmental Impact Report (EIR). As stated in the State CEQA Guidelines Section 15121¹:

An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency (when considering whether to approve a project).

An EIR is the public document used to meet these requirements. The EIR must also disclose: significant adverse environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and the significant cumulative impacts of all past, present and reasonably foreseeable future projects. From this point forward, an "impact" or "significant impact" is assumed to be an adverse effect on the environment.

This EIR is intended to provide information to the public and to decision makers regarding the potential environmental effects of adoption and implementation of the Oliveira Dairy Expansion project. Prior to considering approval of this request, Merced County (County) must certify that this EIR is adequate under CEQA and that County decision makers have considered the information herein. Upon making this finding, the County may then consider approval of the Oliveira Dairy Expansion project further described in the Project Description in Chapter 3.

1.2 Type of Environmental Impact Report

This EIR is being prepared as a "Project" EIR pursuant to the State CEQA Guidelines Section 15161. This project EIR is tiered from the EIRs for the 2030 Merced County General Plan (certified on December 10, 2013) and the Merced County Animal Confinement Ordinance Revision as certified and adopted on October 22, 2002. (For a discussion of tiering in this document, see Section 1.4 below.) A project EIR is prepared to examine the environmental impacts of a specific development project. According to the State CEQA Guidelines, "(t)his type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation." This EIR is intended to serve as the environmental document for all activities related to the Oliveira Dairy Expansion project described more fully in the Project Description, including issuance of a Conditional Use Permit and construction and building permits by Merced County, and appropriate permits from the San Joaquin

Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.

Valley Air Pollution Control District (SJVAPCD) and the California Central Valley Regional Water Quality Control Board (CVRWQCB).

1.3 Public Review and CEQA Process

CEQA provides three opportunities for public participation during the environmental review process. These points are: (1) during the Notice of Preparation (NOP), when the public and agencies are informed that an EIR is to be prepared and is requested to comment on the scope and contents of the proposed EIR; (2) upon circulation of the Draft EIR when the public and agencies can comment on the adequacy of the environmental document; and (3) finally, after circulation of the Final EIR, when the public and agencies can evaluate the lead agency's responses to comments submitted on the Draft EIR.

In the case of the Oliveira Dairy Expansion EIR, the Notice of Preparation of an EIR was filed with the Office of Planning and Research (OPR) on August 21, 2018. The NOP and Initial Study were circulated to the public, local and state agencies, and other interested parties to solicit comments on the proposed project. Environmental issues and alternatives raised by comments received on the NOP during the 30-day public review period were considered for inclusion in the EIR (see Appendices A and B). Public and agency comments received on the NOP were reviewed, and environmental issues identified in the comment letters were individually referenced in Appendix B to indicate the specific section in the EIR where these issues are addressed.

Pursuant to the State CEQA Guidelines, the focus of this Draft EIR includes the specific issues identified in the NOP, as well as concerns identified in the responses to the NOP.

This Draft EIR will be published and circulated for public comment for a period of 45 days. Written and emailed comments from the public and interested and responsible agencies may be submitted at any time during the comment period. Written and emailed comments should be submitted to:

Merced County
Community and Economic Development Department
2222 'M' Street
Merced, CA 95340
(209) 385-7654
BGuerrero@co.merced.ca.us

For emailed comments, please include the phrase, "Oliveira Dairy Expansion EIR" in the subject line.

After the close of the comment period, the County will respond in writing to all comments submitted during the comment period. The comments and responses will be published for agency and public review prior to the action of the Merced County Planning Commission on certification of the EIR. The Draft EIR, the comments and responses, including any revisions of the Draft EIR contained therein, together with a Mitigation Monitoring and Reporting Program (MMRP) as described below, will constitute the Final EIR that the County will evaluate for certification, based on review and consideration of the EIR and other evidence presented in the public record.

Prior to certification of the EIR, the County will prepare written findings of fact for each significant environmental impact identified in the EIR, which in turn must be supported by substantial evidence in the administrative record. For each significant impact, the County must:

- determine that changes in the project (*typically adopted mitigation measures*) have been made to substantially reduce the magnitude of the impact;
- determine that the changes (*mitigation measures*) to the project are within another agency's jurisdiction, and have been or should be adopted; or,
- find that specific economic, social, legal, technical, or other considerations make mitigation measures or alternatives infeasible (CEQA Guidelines Section 15091(a)).

After considering the Final EIR in conjunction with making findings, if the proposed project would result in significant environmental impacts after imposition of feasible mitigation measures, the County may approve the project if the benefits of the project outweigh the unavoidable environmental effects. Under these circumstances, a Statement of Overriding Considerations would be prepared explaining why the County is willing to accept each significant effect (CEQA Guidelines Section 15093(c)).

CEQA requires that when a public agency makes findings based on an EIR, the public agency must adopt a MMRP based on those measures that the agency has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment (California Public Resources Code [PRC] Section 21081.6). The reporting or monitoring plan must be designed to ensure compliance with the adopted measures during project implementation (PRC Section 21081.6). The MMRP for this project will be prepared and circulated under separate cover for consideration by the County in conjunction with certification of the Final EIR.

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

1.4.1 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 decisions. 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 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 Oliveira Dairy Expansion EIR, along with other sources, to establish the existing setting for the proposed project, and to 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:

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

1.4.2 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 18.02.02 (Zoning Code Agricultural Zones) were adopted on February 8, 2005. (The Merced County ACO is included as a section of Title 18 Zoning of the Merced County Code.) 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 Oliveira Dairy 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 (DEH), 260 East 15th Street, Merced, California 95341; the Merced County Community and Economic Development Department, 2222 'M' Street, Merced, California 95340; Appendix C of this document; 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 Ordinance requires that all animal confinement facilities, existing and new, complete and implement a Comprehensive Nutrient Management Plan (CNMP). For the construction of a new 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 requirements for the preparation of a Nutrient Management Plan (NMP) and Waste Management Plan (WMP), which would serve in place of the CNMP as allowed by County Code Chapter 18.48.055K. Both the NMP and the WMP have been prepared for the Oliveira Dairy Expansion project (see Appendix L, bound separately).

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 Ordinance 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 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 Ordinance 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. However, the General Order establishes performance standards for new wastewater ponds that are more stringent and replace the ACO requirements.

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 Ordinance prohibits the location of new animal confinement facilities within one-half mile of urban areas, 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 any 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 Oliveira Dairy Expansion project. To ensure compliance with the provisions of the ACO, the Ordinance requires routine inspections of animal confinement facilities by 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.

MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE REVISION EIR

The Merced County Board of Supervisors certified the EIR and adopted the revised ACO on October 22, 2002 (SCH #2000072024). The environmental conclusions of the 2002 EIR were subsequently reconfirmed in an Addendum to the EIR prepared and certified by the County on February 8, 2005. The ACO EIR comprehensively evaluated the potential environmental effects of implementing the revisions to the ACO and from approval of new or expanding animal confinement facilities. The ACO EIR identified a number of mitigation measures that would reduce the magnitude of these potential effects. Those measures were subsequently adopted by the County as conditions of approval for the revisions to the ACO, and a Mitigation Monitoring Program was adopted. Because the Oliveira Dairy Expansion project is subject to the requirements of the ACO for new and expanding animal confinement facilities, those previously adopted mitigation measures and conditions apply to the Oliveira Dairy Expansion project, and would continue to apply after approval of the currently requested actions.

INCORPORATION OF THE ANIMAL CONFINEMENT ORDINANCE EIR BY REFERENCE

The EIR for the ACO Revision contains a comprehensive analysis of environmental effects for new and expanding animal confinement facilities in Merced County, including a cumulative analysis through the year 2010 herd forecast conditions. The 2030 General Plan EIR updated and expanded the environmental analyses and conclusions presented in the 2002 ACO EIR regarding the cumulative condition for all project types, including proposed and expanding dairy facility projects such as the Oliveira Dairy Expansion project. Because of its importance relative to understanding the environmental analysis that has occurred to date with respect to the potential environmental impacts associated with the construction and operation of animal confinement facilities in Merced County, the ACO EIR is hereby incorporated by reference pursuant to State CEQA Guidelines Section 15150 as though fully set forth herein. The ACO EIR can be reviewed at the following location:

Merced County Division of Environmental Health 260 East 15th Street, Merced, California 95341

1.5 TIERING FROM THE 2030 MERCED COUNTY GENERAL PLAN 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. Through tiering, a subsequent environmental analysis can incorporate, by reference, discussion that summarizes general environmental data found in the program EIR that establishes cumulative impacts and mitigation measures, the planning context, and/or the regulatory background. These broad-based issues need not be reevaluated subsequently, having been previously identified and evaluated at the program stage.

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. Section 21093(b) of the Public Resources Code requires the tiering of environmental review whenever feasible, as determined by the Lead Agency.

In the case of the Oliveira Dairy Expansion project, the environmental analysis for this EIR is tiered from the EIR for the 2030 Merced County General Plan. The Merced County Board of Supervisors certified the EIR and adopted the 2030 General Plan on December 10, 2013 (SCH #2011041067). The 2030 General Plan regulates the location, use, design, construction, and operation of developed land uses within the County; all existing and proposed land uses within the County are required to comply with the goals and policies of the 2030 General Plan, including the Oliveira Dairy Expansion project. To reflect this, the requirements of the 2030 General Plan and conclusions of the environmental analysis contained in the 2030 General Plan EIR were incorporated in this EIR.

The 2030 General Plan EIR comprehensively evaluated the potential environmental effects of implementing the 2030 General Plan and from the approval of new or modified land uses. The 2030 General Plan EIR identified a number of mitigation measures that would reduce the magnitude of these potential effects. Those measures were subsequently adopted by the County in its approval of the 2030 General Plan, and a Mitigation Monitoring and Reporting Program was adopted. Because the Oliveira Dairy Expansion project is consistent with, and implements, the 2030 General Plan, those previously adopted mitigation measures and conditions apply to the Oliveira Dairy Expansion project, and would continue to apply after approval of the currently requested actions. Therefore, the Oliveira Dairy Expansion project is related to the 2030 General Plan EIR and, pursuant to Section 15152(a) of the CEQA Guidelines, tiering of environmental documents is appropriate.

The 2030 General Plan EIR can be reviewed at the following location:

Community and Economic Development Department 2222 'M' Street, Merced, California 95340

Incorporation of the 2030 Merced County General Plan EIR By Reference

Based on the reasoning set forth above, this environmental evaluation implements, and is consistent with, mitigation measures and study protocols adopted by Merced County in its certification of the 2030 General Plan EIR and its approval of the 2030 Merced County General Plan. Because of its importance relative to understanding the environmental analysis that has occurred to date with respect to the potential environmental impacts associated with the construction and operation of developed land uses in Merced County, the 2030 General Plan EIR is hereby incorporated by reference pursuant to CEQA Guidelines Section 15150 as though fully set forth herein.

Summary of the Impacts Analysis of the 2030 Merced County General Plan EIR

The 2030 Merced County General Plan EIR presents an assessment of the environmental impacts associated with the implementation of the General Plan and land uses developed consistent with the Plan in Merced County. The EIR evaluated the environmental impacts of the Plan on a comprehensive basis, including discussion of the full range of impacts that would occur because of future development. The EIR identified potential significant environmental impacts arising from implementation of the General Plan and land uses developed consistent with the Plan for the following issue areas:

Aesthetics: light and glare; and cumulative impacts to visual quality.

Agriculture and Forestry: conversion of Important Farmland to non-agriculture use; conflict with zoning for agricultural use or provisions of the Williamson Act; land use changes that would result in conversion of farmland to non-agricultural uses from urban development; land use changes that would result in conversion of farmland to non-agricultural uses due to the Minor Subdivision of Rural Parcels or due to inadequate parcel sizes; and cumulative impacts to agricultural resources.

Air Quality: operational emissions of PM₁₀ and PM_{2.5} associated with General Plan buildout; health risks associated with locating sensitive receptors near high volume roads; cumulative impacts to air quality.

Biological Resources: adverse effects to special status species and sensitive habitats due to conversion of farmlands and open space; adverse effect on wetlands, riparian habitat, and other sensitive natural communities; loss or modification of federally protected wetlands; interference with animal movement/migration patterns; cumulative impacts to biological resources.

Cultural Resources: adverse changes to the significance of a historical resource; adverse change in the significance of archaeological resources, paleontological resources, unique geological features, or disturbances to human remains; degradation or loss of traditional cultural properties where Native American customs and traditions are practiced; cumulative impacts to cultural resources.

Geology: use of septic tanks or alternative wastewater disposal systems in unfit soils that may result in increased nutrients or other pollutants reaching and damaging groundwater resources.

Global Climate Change: increase in GHG emissions associated with 2030 General Plan buildout; increase in GHG emissions that would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions; cumulative impacts to global climate change.

Hazards and Hazardous Materials: projects located on a site that is included on a list of hazardous materials sites resulting in a significant hazard to the public or to the environment; projects located within an airport land use plan or within the vicinity of a public or private airport resulting in a safety hazard for people working or residing in the area.

Hydrology and Water Quality: depletion of groundwater supplies or interference with groundwater recharge; modification of surface water drainage patterns resulting in detrimental flooding or substantial erosion or siltation; cumulative impacts to hydrology and water quality.

Land Use Compatibility: physical division of an established community.

Mineral Resources: loss of mineral resources; and cumulative loss of mineral resources.

Noise: permanent increase in ambient noise levels; traffic noise level increases at existing sensitive uses caused by development consistent with the 2030 General Plan; exposure of people to, or generation of excessive groundborne vibration or groundborne noise levels; cumulative impacts to noise.

Population and Housing: inducement of population growth, directly or indirectly.

Transportation and Circulation: conflict with an applicable plan, ordinance or policy establishing measures of effectiveness of county roads, State Highways, or streets within incorporated cities in Merced County; increase hazards due to a design feature or incompatible uses; inadequate emergency access; conflict with policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or decrease the performance or safety of those facilities; cumulative impacts to transportation and circulation.

Utilities and Service Systems: sufficient water supply resources available to accommodate continued development through buildout of the 2030 General Plan; cumulative impacts to utilities and service systems.

Other CEQA Topics: cumulative impacts to growth inducement and irreversible environmental changes.

1.6 EIR ORGANIZATION

This Draft EIR is organized into sixteen chapters, each dealing with a separate aspect of the required content of an EIR as described in the State CEQA Guidelines. To help the reader locate information of particular interest, a brief summary of the contents of each section of the EIR is provided. The following sections are contained within the EIR:

Chapter 1: Introduction provides an overview of the purpose of the EIR, the scope of this EIR, the environmental review process for the EIR and the proposed project, the general format of the document, and frequently used terms.

Chapter 2: Executive Summary contains a summary of environmental impacts, proposed mitigation, level of significance after mitigation, and unavoidable impacts. Also contained within this section are a summary description of project alternatives, potential cumulative impacts, and any areas of controversy regarding the proposed project known to the lead agency.

Chapter 3: Project Description defines the project location, summarizes components of the proposed project, outlines the project objectives, and describes the required approvals for the proposed project.

Chapter 4: Introduction to the Environmental Impact Report describes the framework of analysis contained in chapters 5 through 11 and includes project development standards required by the County. This chapter also contains a discussion of the relationship of the proposed project to the policies and procedures of the Merced County General Plan, the Merced County ACO, a chapter of the Merced County Zoning Code, and other provisions of the Merced County Zoning Code.

Chapters 5 through 11: These chapters describe and evaluate individual environmental issue areas, including the existing environmental setting and background, applicable environmental thresholds, environmental impacts associated with the project, policy considerations related to the particular environmental issue area under analysis, and mitigation measures to reduce environmental impacts.

Chapter 12: Alternatives Analysis analyzes feasible alternatives to the proposed project, including the No Project Alternative and any feasible project alternatives necessary to reduce or avoid identified significant project impacts.

Chapter 13: Required CEQA Analyses provides an analysis of the proposed project's potential growth-inducing and cumulative impacts, significant and unavoidable impacts, environmental effects of the project found not to be significant, and irreversible changes to the natural environment resulting from the proposed project.

Chapter 14: List of Preparers identifies all individuals responsible for the preparation of this report, including names of the EIR authors and consultants.

Chapter 15: References compiles a list of all documents used and persons, organizations, or agencies consulted in the preparation of this EIR.

Chapter 16: Frequently Used Acronyms and Abbreviations provides a list of all the acronyms and abbreviations used in this EIR.

Appendices set forth data supporting the analysis or contents of this EIR (such as the IS/NOP and technical studies).

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1.7 Frequently Used Terms

Implementation - This term implies that something is constructed and becomes operational, or becomes effective.

Project Site - The Oliveira Dairy is located on 22± acres of an existing farm totaling approximately 290 acres in unincorporated Merced County. For the purposes of this EIR, the "project site" refers to the area of active dairy facilities and proposed construction. The project site is located near the southwest corner of West Oak Avenue and North Gurr Road in the Merced area of the County. For more information regarding the location and area of the project, see Chapter 3, *Project Description*.

Project Area - Throughout this document, "project area" refers to all parcels that are part of the project, including the active dairy facilities and dairy farm cropland. This includes the 22± acres of active dairy facilities, the 249± acres of the project area that are currently used for the production of crops and the application of manure process water and/or solid manure, and the remaining project acres consisting of field roads and ancillary farm uses.

Less-than-Significant Impact - A less-than-significant impact is an impact that would not result in a substantial and adverse change in the environment and would not require mitigation.

Significant Impact - CEQA (PRC Section 21068) defines a significant impact as that which has "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." Levels of significance can vary by project, based on the change in the existing physical condition and the "...substantial body of opinion that considers or will consider the effect to be adverse..." The State CEQA Guidelines provide a list of consequences that would normally be regarded as having a significant effect on the environment. This EIR uses the CEQA definition of significant impacts together with the local environmental standards established by the County. Mitigation measures are proposed, when feasible, to reduce the magnitude of significant impacts.

Significant and Unavoidable Impact - A significant and unavoidable impact is one that would result in a substantial adverse effect on the environment which could not be mitigated to a less-than-significant level. A project could still proceed with significant unavoidable impacts, but the County would then be required to prepare a Statement of Overriding Considerations, pursuant to State CEQA Guidelines Section 15093, that would explain why the County would proceed with the project despite the occurrence of the impacts.