DRAFT EIR

FOR THE

VISTA RANCH PROJECT

Volume I – Draft EIR

JULY 2024

Prepared for:

City of Clovis | Planning Division
1033 Fifth Street
Clovis, CA 93612
Phone: 559.324.2383

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818s

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

DRAFT EIR

FOR THE

VISTA RANCH PROJECT

Volume I – Draft EIR

JULY 2024

Prepared for:

City of Clovis | Planning Division
1033 Fifth Street
Clovis, CA 93612
Phone: 559.324.2383

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

Chapters **Page Numbers**

Executive Summary ES-1

1.0 Introduction 1.0-1

1.1 Purpose and Intended Uses of the EIR 1.0-1
1.2 Type of EIR 1.0-1
1.3 Known Responsible and Trustee Agencies 1.0-1
1.4 Environmental Review Process 1.0-2
1.5 Organization and Scope 1.0-4
1.6 Comments Received on the Notice of Preparation 1.0-6
1.7 Potential Areas of Concern 1.0-6

2.0 Project Description 2.0-1

2.1 Project Location 2.0-1
2.2 Project Site Defined 2.0-1
2.3 Project Setting 2.0-2
2.4 Project Goals and Objectives 2.0-3
2.5 Project Entitlements 2.0-4
2.6 Development Project Characteristics 2.0-9
2.7 Alternatives 2.0-11
2.8 Uses of the EIR and Required Agency Approvals 2.0-12

3.1 Aesthetics and Visual Resources 3.1-1

3.1.1 Environmental Setting 3.1-1
3.1.2 Regulatory Setting 3.1-7
3.1.3 Impacts and Mitigation Measures 3.1-11

3.2 Agricultural Resources 3.2-1

3.2.1 Environmental Setting 3.2-1
3.2.2 Regulatory Setting 3.2-8
3.2.3 Impacts and Mitigation Measures 3.2-12

3.3 Air Quality 3.3-1

3.3.1 Environmental Setting 3.3-1
3.3.2 Regulatory Setting 3.3-13
3.3.3 Impacts and Mitigation Measures 3.3-25

3.4 Biological Resources 3.4-1
3.4.1 Environmental Setting 3.4-3
3.4.2 Regulatory Setting 3.4-14
3.4.3 Impacts and Mitigation Measures 3.4-22

3.5 Cultural Resources 3.5-1
3.5.1 Environmental Setting 3.5-1
3.5.2 Regulatory Setting 3.5-15
3.5.3 Impacts and Mitigation Measures 3.5-20

3.6 Geology and Soils 3.6-1
3.6.1 Environmental Setting 3.6-1
3.6.2 Regulatory Setting 3.6-15
3.6.3 Impacts and Mitigation Measures 3.6-20

3.7 Greenhouse Gases and Climate Change 3.7-1
3.7.1 Environmental Setting 3.7-1
3.7.2 Regulatory Setting 3.7-8
3.7.3 Impacts and Mitigation Measures 3.7-21

3.8 Hazards and Hazardous Materials 3.8-1
3.8.1 Physical Setting 3.8-1
3.8.2 Regulatory Setting 3.8-18
3.8.3 Impacts and Mitigation Measures 3.8-26

3.9 Hydrology and Water Quality 3.9-1
3.9.1 Environmental Setting 3.9-1
3.9.2 Regulatory Setting 3.9-9
3.9.3 Impacts and Mitigation Measures 3.9-20

3.10 Land Use, Population, and Housing 3.10-1
3.10.1 Environmental Setting 3.10-1
3.10.2 Regulatory Setting 3.10-4
3.10.3 Impacts and Mitigation Measures 3.10-21

3.11 Noise 3.11-1
3.11.1 Environmental Setting 3.11-1
3.11.2 Regulatory Setting 3.11-7
3.11.3 Impacts and Mitigation Measures 3.11-13

3.12 Public Services and Recreation 3.12-1
3.12.1 Environmental Setting 3.12-1
3.12.2 Regulatory Setting 3.12-14
3.12.3 Impacts and Mitigation Measures 3.12-24

3.13 Transportation and Circulation 3.13-1
3.13.1 Introduction 3.13-1
3.13.3 Existing Conditions 3.13-2
3.13.7 Regulatory Setting 3.13-9
3.13.8 CEQA Transportation Analysis 3.13-14
3.13.9 Impacts and Mitigation Measures 3.13-15

3.14 Utilities 3.14-1
3.14.1 Wastewater Supply 3.14-1
Environmental Setting 3.14-1
Regulatory Setting 3.14-3
Thresholds of Significance 3.14-6
Impacts and Mitigation Measures 3.14-6
3.14.2 Water Supplies 3.14-10
Environmental Setting 3.14-10
Regulatory Setting 3.14-18
Thresholds of Significance 3.14-24
Impacts and Mitigation Measures 3.14-24
3.14.3 Storm Water 3.14-30
Environmental Setting 3.14-30
Regulatory Setting 3.14-31
Thresholds of Significance 3.14-36
Impacts and Mitigation Measures 3.14-36
3.14.4 Solid Waste 3.14-39
Environmental Setting 3.14-39
Regulatory Setting 3.14-42
Thresholds of Significance 3.14-46
Impacts and Mitigation Measures 3.14-46
3.14.5 Energy, Natural Gas, & Telecommunications 3.14-49
Environmental Setting 3.14-49
Regulatory Setting 3.14-49
Thresholds of Significance 3.14-51

Impacts and Mitigation Measures 3.14-51

4.0 Other CEQA-Required Topics 4.0-1
4.1 Cumulative Setting and Impact Analysis 4.0-1
4.2 Significant Irreversible Effects 4.0-32
4.3 Significant and Unavoidable Impacts 4.0-34

5.0 Alternatives to the Proposed Project 5.0-1
5.1 CEQA Requirements 5.0-1
5.2 Alternatives Considered in this EIR 5.0-3
5.3 Environmental Analysis 5.0-4

6.0 Report Preparers 6.0-1

7.0 References 7.0-1

Tables **Page Numbers**

Table ES-1: Comparison Summary of Alternatives to the Proposed Project ES-5
Table ES-2: Project Impacts and Proposed Mitigation Measures ES-8
Table 3.2-1: Summary Comparison of Crop Values 3.2-1
Table 3.2-2: Soil Capability Classification 3.2-2
Table 3.2-3: Storie Index Rating System 3.2-3
Table 3.2-4: Frenso County Farmlands Summary and Change by Land Use Category 3.2-4
Table 3.2-5: Important Farmland 3.2-5
Table 3.2-6: Project Site Soils 3.2-7
Table 3.3-1: Federal and State Ambient Air Quality Standards 3.3-9
Table 3.3-2: State and National Attainment Status in Fresno County 3.3-10
Table 3.3-3 Ambient Air Quality Monitoring Data Summary (Clovis-N Villa Avenue) - Ozone 3.3-11
Table 3.3-4: Ambient Air Quality Monitoring Data Summary (Clovis-N Villa Avenue) - PM_{10} 3.3-11
Table 3.3-5 Ambient Air Quality Monitoring Data Summary (Clovis-N Villa Avenue) - $PM_{2.5}$ 3.3-11
Table 3.3-6: San Joaquin Valley Air Pollution Control District Significance Thresholds 3.3-26
Table 3.3-7: Anticipated Construction Schedule 3.3-27
Table 3.3-8: Operational Project Generated Emissions (tons per year) - Unmitigated 3.3-28
Table 3.3-9: Operational Project Generated Emissions (tons per year) - Mitigated 3.3-29
Table 3.3-10: BenMAP-Estimated Annual Mean Ozone Health Effects of the Project Emissions Across the San Joaquin Valley Model Domain 3.3-32
Table 3.3-11: Maximum Construction Project Generated Emissions (Tons Per Year) 3.3-36
Table 3.3-12: CARB Minimum Separation Recommendations on Siting Sensitive Land Uses 3.3-36
Table 3.4-1: Special-Status Plants with Potential to be Present in MPArea 1 ..... 3.4-6
Table 3.4-2: Special-Status Wildlife Species Known to be Present in MPArea 1 ..... 3.4-9
Table 3.4-3: Additional Special-Status Wildlife Species with Potential to be Present 3.4-10

Table 3.4-4: Relevant Goals and Policies by General Plan Element 3.4-21
Table 3.4-5: Impacts on California Tiger Salamander Habitat 3.4-32
Table 3.4-6: Impacts on Vernal Pool Fairy Shrimp Habitat 3.4-41
Table 3.4-7: Impacts on Western Spadefoot Habitat 3.4-42
Table 3.4-8: Wetland Impacts Due to MPArea 1 Development 3.4-57
Table 3.4-9: Consistency Of MPArea 1 Development With General Plan Policies For Biological Resources 3.4-61
Table 3.5-1: Cultural Resources Recorded within the Study Area 3.5-12
Table 3.6-1: Modified Mercalli Intensity Scale for Earthquakes 3.6-4
Table 3.6-2: Project Site Soils 3.6-7
Table 3.7-1: PG&E and the State of California Power Mix in 2021 ..... 3.7-7
Table 3.7-2: Summary of Statewide GHG Reduction Strategies that Apply to the Project 3.7-23
Table 3.7-3: Total Construction GHG Emissions (MT CO_2e/year) 3.7-33
Table 3.7-4: Operational GHG Emissions at Buildout (Metric Tons/Year) - Unmitigated 3.7-33
Table 3.7-5: Operational Ghg Emissions At Buildout (Metric Tons/Year) - Mitigated 3.7-34
Table 3.7-6: PROJECT CONSISTENCY WITH THE 2022 SCOPING PLAN 3.7-34
Table 3.7-7: Project Consistency with the Fresno COG's 2022 RTP/SCS 3.7-36
Table 3.7-8: On-road Mobile Fuel Usage by Project Construction Activities – By Phase 3.7-43
Table 3.10-1: Population Growth 3.10-3
Table 3.10-2: Housing Unit Growth 3.10-3
Table 3.10-3: General Plan Existing Policy Consistency 3.10-23
Table 3.11-1: Typical Noise Levels 3.11-3
Table 3.11-2: Existing Short-term Noise Measurement Data 3.11-5
Table 3.11-3: Vibration Levels for Various Construction Equipment 3.11-6
Table 3.11-4: Guideline Vibration Damage Potential Threshold Criteria 3.11-6
Table 3.11-5: Land Use and Noise Compatibility Matrix 3.11-9
Table 3.11-6: Maximum Exterior Noise Standards 3.11-9
Table 3.11-7: Maximum Interior Noise Standards 3.11-10
Table 3.11-8: Typical Noise Levels 3.11-15
Table 3.11-9: Existing Plus Project Scenario - Noise Levels Along Roadways (dBA CNEL) 3.11-16
Table 3.11-10: Cumulative Scenario - Noise Levels Along Roadways (dBA CNEL) 3.11-18
Table 3.12-1: Clovis Crime Statistics (2021 to 2022) 3.12-4
Table 3.12-2: Call Volume by Type 3.12-6
Table 3.12-3: 90th Percentile Response Goals and Response Time Performance 3.12-6
Table 3.12-4: Summary of Parks and Recreation Facilities 3.12-9
Table 3.12-5: Public Schools Serving Clovis 3.12-11
Table 3.12-5: Enrollment by Grade CUSD (2022-2023) 3.12-12
Table 3.13-1: Collector Streets 3.13-5
Table 3.13-2: Bus Routes Serving the Study Area 3.13-7
Table 3.13-3: Regional VMT Without and With Retail 3.13-17

Table 3.14-1: Historical Groundwater Production (AFY) 3.14-16
Table 3.14-2: Existing and Projected Total Water Demand in Normal Years, AFY 3.14-16
Table 3.14-3 Projected Future Dry Year Potable and Raw Water Supply and Demand, AFY 3.14-17
Table 3.14-4: Project impacts to the City's water supply portfolio (WMP) 3.14-26
Table 3.14-5: Project impacts to the City's water supply portfolio (UWMP) 3.14-26
Table 3.14-6: Summary of Project Water Supplies and Demands 3.14-28
Table 3.14-7: Solid Waste Generation Rates 3.14-41
Table 4.0-1: Growth Projections 4.0-2
Table 4.0-2: Summary of Project Water Supplies and Demands 4.0-28
Table 5.0-1: Comparison of Alternative Project Impacts to the Proposed Project 5.0-61

Figures

Note: Figures are located at the end of the chapters.

Figure 2.0-1 Regional Location Map
Figure 2.0-2 Project Vicinity Map
Figure 2.0-3 Assessor Parcel Map
Figure 2.0-4 Aerial Photo of Project Site
Figure 2.0-5 Existing City Land Use Designations
Figure 2.0-6 Existing County Land Use and Zoning
Figure 2.0-7 Proposed General Plan Land Uses Designations
Figure 2.0-8 Focus Area 13
Figure 2.0-9 Master Plan Zoning
Figure 2.0-10 Planning Areas
Figure 3.2-1 Important Farmlands Map
Figure 3.2-2 Soils Map
Figure 3.2-3 Williamson Act Map
Figure 3.4-1 Study Area Locations
Figure 3.4-2 Land Cover Types
Figure 3.4-3 Overview Map of Potential Jurisdictional Aquatic Resources Map
Figure 3.4-3A Detail Potential Jurisdictional Aquatic Resources Map A
Figure 3.4-3B Detail Potential Jurisdictional Aquatic Resources Map B
Figure 3.4-3C Detail Potential Jurisdictional Aquatic Resources Map C
Figure 3.4-3D Detail Potential Jurisdictional Aquatic Resources Map D
Figure 3.4-3E Detail Potential Jurisdictional Aquatic Resources Map E
Figure 3.4-3F Detail Potential Jurisdictional Aquatic Resources Map F
Figure 3.4-3G Detail Potential Jurisdictional Aquatic Resources Map G
Figure 3.4-3H Detail Potential Jurisdictional Aquatic Resources Map H
Figure 3.4-4 CNDDB Records
Figure 3.4-5 Aquatic Resources Assessment
Figure 3.4-6 Aquatic Resources on Project Site
Figure 3.6-1 Earthquake Faults Map
Figure 3.9-1 Watersheds

Figure 3.9-2 FEMA Floodplain
Figure 3.9-3 Dam Inundation
Figure 3.13-1 Vista Ranch Project and Study Area
Figure 3.13-2 Existing Transit Service in the Study Area
Figure 3.13-3 Existing and Proposed Bike Facilities in the Study Area
Figure 3.13-4 Existing and Missing Sidewalks in the Study Area

Appendices

Appendix A: Notice of Preparation, and NOP Comments

Appendix B: Land Evaluation and Site Assessment (LESA) Model

Appendix C: Air Quality, Greenhouse Gas, and Energy Appendices

Appendix D: Biological Documentation

Appendix E: Cultural Investigation and Tribal Consultation Documentation

Appendix F: Geotechnical Investigation

Appendix G: Phase 1 Environmental Site Assessment

Appendix H: Environmental Noise Assessment

Appendix I: Transportation Analysis

Appendix J: Wastewater Study

Appendix K: Water Supply Assessment

Appendix L: Water Infrastructure Investigation

This Page Intentionally Left Blank.

INTRODUCTION

The City of Clovis, as the lead agency, determined that the proposed Vista Ranch is a "project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report (EIR) prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

The EIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This EIR identifies issues determined to have no impact or a less than significant impact and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the Notice of Preparation (NOP) were considered in preparing the analysis in this EIR.

PROJECT OBJECTIVES

The principal objective of the proposed Project is the expansion of the City's SOI to include the Project site, annexation, master planning, and subsequent development of land to accommodate growth. The City has established several additional project goals and objectives that more fully inform the Project purpose. These Project goals and objectives are as follows:

- Expand the City's SOI in an area contemplated by the City General Plan to establish a logical and orderly boundary that promotes the efficient extension of municipal services to areas planned for growth.
- Undertake Master Planning as a long-range planning tool to guide development within areas designated for growth under the City of Clovis General Plan.
- Provide residential housing opportunities that are visually attractive and accommodate the future housing demand in Clovis.
- Refine the mixture of housing types, sizes and densities that collectively provide for local and regional housing demand.
- Provide infrastructure that meets City standards and is integrated with existing and planned facilities and connections.
- Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet City standards.
- Develop a strong pedestrian network that links activities, recreational amenities, local commercial uses and neighborhoods together.
- Establish neighborhood designs that consider safety and security of citizens.
- Consider affordability and housing diversity by developing residential uses that are proximate to urban services and roadways and varied in size and density.
- Embrace the natural resources and views of the Sierra Nevada Mountain range.

PROJECT SITE

The Project site includes several distinct planning boundaries as defined below. The following terms are used throughout this document to describe planning area boundaries within the Project site:

Project Area: Includes the whole of the Project site (approximately 952 acres), all of which is currently located in the City's Planning Area and would be incorporated into the City's sphere of influence (SOI). The Project area includes (1) the approximately 507-acre Vista Ranch Master Plan and (2) the approximately 445-acre Non-Development Area, as described below.

Vista Ranch Master Plan (Master Plan): Includes approximately 507 acres located entirely within the Project Area. The Master Plan contemplates the construction of up to 3,286 residential units, approximately 16 acres of commercial/mixed-uses, approximately 19 acres for an elementary school site, approximately 32 acres for mini-storage, and approximately 59 acres of parks, trails and preserved open space. The Master Plan is divided into two distinct planning areas, as further defined below: (1) MPArea 1, an approximately 368-acre area proposed for immediate development, and (2) MPArea 2, the remaining approximately 139 acres that is anticipated for future development.

- **MPArea 1 (Development Area):** MPArea 1 includes approximately 368 acres proposed to be developed by Wilson Premier Homes, Inc. A majority of the Development Area has been planned for urban uses and is included in the area designated as the Northeast Urban Center in the City's 1993 General Plan and subsequent General Plan updates. Consistent with that vision, the approximately 368-acre Development Area would consist of a mix of urban uses, including 2,500 to 2,718 residential units, non-residential uses for future gateway neighborhood commercial uses and community recreational facilities up to 133,000 square feet in size, and approximately 43 acres of parks, trails and open space. The Development Area would have a full project-level analysis in the EIR, considering all entitlements necessary for development in the near term.
- **MPArea 2:** MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan. MPArea 2 also plans for a mix of urban uses as part of the Northeast Urban Center under the City's 1993 General Plan and subsequent General Plan updates. MPArea 2 is anticipated to have a programmatic-level analysis in the EIR. Future development of MPArea 2 is at the discretion of the property owners and subject to project-level analysis.
- **Non-Development Area:** The Non-Development Area includes approximately 445 acres that have not requested, nor would receive, any entitlements other than to be included in the SOI expansion. The Non-Development Area is anticipated to have a programmatic-level analysis in the EIR.

PROJECT DESCRIPTION

The Vista Ranch Project (Project) is located directly north of the City of Clovis (City) limit line, in unincorporated Fresno County (County). The Project site consists of approximately 952 acres located within the City's Planning Area and is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the

west by North Fowler and North Sunnyside Avenues. Figures 2.0-1 and 2.0-2 show the proposed Project's regional location and vicinity. The Project site is located within portions of Sections 21, 22, and 23 of Township 12 South, Range 21 East, Mount Diablo Base and Meridian (MDBM).

The proposed Project is a mixed-use development anticipated to provide not less than 2,600 residential units and up to 3,286 residential units, including single- and multi-family units. In addition, Master Development Plan includes non-residential uses including a mixed-use neighborhood commercial center designed to provide localized retail and service uses and employment to the Project area and local surrounding areas, a mini storage site approved for development by the County of Fresno, an elementary school, and community recreation centers serving the community.

The proposed Project would require general plan amendments, prezone, SOI expansion, annexation, Master Plan, vesting tentative map (VTM), and development agreement. The general plan amendments cover City of Clovis General Plan Focus Area 13. This would include land use modifications, focus area modification, Shepherd Avenue access modification, Circulation Element modifications, and Parks and Open Space Element modification to accommodate the proposed Master Plan.

The VTM would cover approximately 368 acres for the development of up to 2,718 residential units in MPArea 1. The VTM proposes new public roadways with pedestrian/bicycle and vehicular access, landscaping and lighting, and other infrastructure, such as water, storm drainage, wastewater facilities. All onsite infrastructure is located within the boundaries of the Project site, and offsite infrastructure may include connections and improvements to existing infrastructure in adjacent roadways, including Behymer Avenue between Sunnyside Avenue and the Project Area, Fowler Avenue between Shepherd and Behymer Avenues, Perrin Avenue between Fowler and the Project Area, Shepherd Avenue between Fowler and DeWolf and Locan Avenues within the Project Area. All infrastructure design would be confirmed through engineering studies and calculations.

The proposed Project includes the amendment of the City's SOI to include the entire approximately 952-acre Project site. The proposed annexation would include approximately 507 acres, which covers the entire boundary of the proposed Master Plan but not the remaining 445-acre Non-Development Area.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the proposed Project that are known to the City of Clovis, were raised during the NOP process, or raised during preparation of the Draft EIR. This Draft EIR discusses impacts associated with aesthetics, agricultural resources, air quality, biological resources, cultural and tribal resources, geology and soils, greenhouse gas and climate resources, hazards and hazardous materials including wildfire, hydrology and water quality, land use, population and housing, noise, public services and recreation, transportation and circulation, and utilities and service systems.

The following are topics of public concern or potential controversy that have become known to the City staff based on public input, known regional issues, and staff observations:

- Agricultural: conversion of farmland, impacts to adjacent farmland, cumulative loss of farmland, compatibility with Williamson Act contracts, impacts on agricultural operations, mitigation measures for agricultural impacts;
- Air Quality/Greenhouse Gas Emissions/Energy: project related air emissions, construction emissions, operations emissions, quantification of emissions, health risk screening/assessment, ambient air quality, emissions reduction, vegetation barriers/urban greening, clean lawn/garden equipment, District rules/regulations;
- Biological: wildlife movement/habitat connectivity; potential for impacts on special-status plants; potential for impacts on multiple special-status wildlife species and their habitat; impacts on jurisdictional wetlands/waters; effects of new nighttime lighting on wildlife;
- Hazards/Hazardous Materials: Use or storage of hazardous materials and wastes, underground petroleum storage tanks, protection of groundwater, proper destruction of wells and septic tanks, appropriate construction equipment operations and maintenance;
- Hydrology/Water Supply Concerns: well water recharge/groundwater, irrigation, water supply; non-potable water supply, flood control/drainage, impervious surfaces, storm drainage easements;
- Land Use and Planning: Affordable housing;
- Noise: Compliance with the Noise Element, elevated noise levels;
- Traffic: Need for a traffic study, additional traffic, need for street improvements, need for improvements on internal roads and access to Fowler/Behymer; vehicle miles traveled, intersections Herndon Avenue/Fowler, and SR168/Shepherd Avenue, multimodal transportation, bicycle and pedestrian facilities, public transportation, connectivity between residential and commercial/retail uses, feasible mitigation, EV charging;
- Utilities: Costs of utility expansion, cumulative impacts.

ALTERNATIVES TO THE PROPOSED PROJECT

The CEQA Guidelines require an EIR to describe a reasonable range of alternatives to the Project or to the location of the Project, which would reduce or avoid significant impacts and which could feasibly accomplish the basic objectives of the proposed Project. Four alternatives to the proposed Project were developed based on input from City staff and the technical analysis performed to identify the environmental effects of the proposed Project. The alternatives analyzed in this EIR include the following four alternatives in addition to the proposed Project.

- **No Project (No Build) Alternative**: Under this alternative, development of the Project site would not occur, and the Project site would remain in its current existing condition.
- **Increased Density Alternative:** Under this alternative, there would be upzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to higher densities to accommodate a 10 percent increase in residential units. The total unit count would increase from 3,286 under the proposed Master Plan to a total of 3,615 under the Increased Density Alternative. The

SOI expansion of the entire Project would still occur, but there would be no planned development of uses or infrastructure in the SOI expansion area.

- **Reduced Density Alternative:** Under this alternative, there would be downzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to very low residential density. The total unit count would decrease from 3,286 under the proposed Master Plan to a total of 854 under the Reduced Density Alternative.
- **Reduced Sphere of Influence Alternative:** Under this alternative, the proposed Project would only expand the SOI and annex the proposed Master Plan area, and it would exclude the 445-acre SOI expansion outside of the proposed Master Plan. It is noted, however, that the reduction in the SOI would eliminate that possibility of the Non-Development Area connecting to City services at some point in the future, if desired by those residents.

Alternatives are described in detail in Chapter 5. Table ES-1 provides a comparison of the alternatives using a qualitative matrix that compares each alternative relative to the other Project alternatives.

TABLE ES-1: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	NO PROJECT (NO BUILD) ALTERNATIVE	INCREASED DENSITY MIXED USE ALTERNATIVE	REDUCED DENSITY ALTERNATIVE	REDUCED SPHERE OF INFLUENCE ALTERNATIVE
Aesthetics and Visual Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Agricultural Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Air Quality	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Biological Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Cultural and Tribal Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Geology and Soils	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Greenhouse Gases, Climate Change and Energy	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Hazards and Hazardous Materials	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Hydrology and Water Quality	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Land Use, Population, and Housing	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Noise	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Public Services and Recreation	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Transportation and Circulation	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Utilities	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)

GREATER = GREATER IMPACT THAN THAT OF THE PROPOSED PROJECT
LESS = LESS IMPACT THAN THAT OF THE PROPOSED PROJECT
EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE PROPOSED PROJECT

As Table ES-1 presents a comparison of the alternative Project impacts with those of the proposed Project. As shown in the table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project (No Build) Alternative is the

environmentally superior alternative, the environmentally superior alternative among the others must be identified. Therefore, the Reduced Density Alternative would be the environmentally superior alternative because all environmental issues would have reduced impacts compared to the proposed Project. It is noted that the Reduced Density Alternative does not fully meet all the Project objectives. The following three Project objectives are not fully met:

- Provide residential housing opportunities that are visually attractive and accommodate the future housing demand in Clovis.
- Refine the mixture of housing types, sizes and densities that collectively provide for local and regional housing demand.
- Consider affordability and housing diversity by developing residential uses that are proximate to urban services and roadways and varied in size and density.

Under the Reduced Density Alternative, there would be downzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to very low residential density. The total unit count would decrease from 3,286 under the proposed Master Plan to a total of 854 under the Reduced Density Alternative. The objectives listed above would satisfy and implement the City General Plan. Land Use Element Policy 3.6, Mix of housing types and uses, encourages development which provides a mix of housing types, unit sizes, and densities at the block level. Land Use Element Policy 5.1, Housing variety in developments, plans for the provision of a variety of housing product types suitable, where each development should contribute to a diversity of housing sizes and types within the standards appropriate to the land use designation. The Reduced Density alternative would result in higher costs of development to create the Master Plan and associated amenities as required in the General Plan, resulting in less affordability in the residential units. Therefore, the Reduced Density Alternative is not consistent with the City General Plan Land Use Element.

The second objective listed above is also consistent with the City requirements in the latest Regional Housing Needs Allocation (RHNA). In light of the Legislature's repeated determinations in recent years that California is facing a statewide housing crisis, State has provided the City with good reason to exercise its legislative discretion to facilitate the construction of new housing. Government Code section 65889.5, subdivision (a)(1)(A), states that "[t]he lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." Subdivision (a)(1)(D) of that section adds that "[m]any local governments do not give adequate attention to the economic, environmental, and social costs of decisions that result in disapproval of housing development projects, reduction in density of housing projects, and excessive standards for housing development projects." The Reduced Density Alternative would result in 2,432 fewer units then the proposed Project, which is not consistent with Legislature's guidance for solving California statewide housing crisis.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

In accordance with the CEQA Guidelines, this EIR focuses on the significant effects on the environment. The CEQA Guidelines defines a significant effect as a substantial adverse change in the physical conditions which exist in the area affected by the proposed Project. A less than significant

effect is one in which there is no long or short-term significant adverse change in environmental conditions. Some impacts are reduced to a less than significant level with the implementation of mitigation measures and/or compliance with regulations.

The environmental impacts of the proposed Project, the impact level of significance prior to mitigation, the proposed mitigation measures and/or adopted policies and standard measures that are already in place to mitigate an impact, and the impact level of significance after mitigation are summarized in Table ES-2.

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
AESTHETICS AND VISUAL RESOURCES			
Impact 3.1-1: Project implementation may result in substantial adverse effects on scenic vistas and resources or substantial degradation of visual character.	LS	*None required.*	LS
Impact 3.1-2: Project implementation may substantially damage scenic resources within a State Scenic Highway.	LS	*None required.*	LS
Impact 3.1-3: Project implementation may result in light and glare impacts.	LS	*None required.*	LS
AGRICULTURAL RESOURCES			
Impact 3.2-1: The proposed Project has the potential to result in the conversion of Farmlands, including Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses.	LS	*None required.*	LS
Impact 3.2-2: The proposed Project has the potential to conflict with existing zoning for agricultural use, or Williamson Act Contracts.	PS	***Mitigation Measure 3.2-1:*** *The Project applicant for any development within the Master Plan Area shall provide the City with evidence that there is not an active Williamson Act contract encumbering their property. The property owner of Planning Area (PA) 29 shall adhere to the "Williamson Act Cancellation Process, Guide for Local Governments (California Department of Conservation 2022) to ensure that the appropriate approvals are received prior to any development.*	LS
Impact 3.2-3: The proposed Project has the potential to result in conflicts with adjacent agricultural lands or indirectly cause conversion of agricultural lands.	LS	*None required*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
AIR QUALITY (This project will comply with all existing regulations, rules, standards, and specifications that are already in place, including from SJVAPCD, CARB, etc.)			
Impact 3.3-1: Project operation has the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan.	PS	***Mitigation Measure 3.3-1:*** *The project shall utilize low-VOC paints, equivalent to 10 g/L of ROG, if commercially available.* ***Mitigation Measure 3.3-2****: During Project operation, the Project applicant shall replace gas-powered landscape equipment with zero-emission landscape equipment, as feasible.* ***Mitigation Measure 3.3-3****: The Project applicant shall install and utilized on-site solar panels as a renewable energy resource, such as on residential and/or other building rooftops within the Project site, to the extent feasible.* ***Mitigation Measure 3.3-4****: Each future development phase shall be required to implement all relevant and feasible emission reduction measures to ensure that criteria pollutant emissions for the overall Vista Ranch Project are reduced or offset. This obligation can be achieved in a variety of ways, which may include compliance with Rule 9510 (Indirect Source Rule), implementation of SJVAPCD "Emission Reduction Clean Air Measures," or another method that can be shown to reduce or offset emissions. The obligation to reduce emissions may be achieved over time and incrementally in connection with discrete phases of development, and proportional to the share of emissions from the phase. The reductions can be achieved through a combination of on-site and/or off-site mitigation strategies. The following is a list of potential criteria pollutant mitigation strategies developed by the SJVAPCD (Emission Reduction Clean Air Measures, 2022) that could be implemented to reduce emissions. Each phase shall be evaluated to determine the relevance and feasibility of the measures listed below.* • *Electric vehicle (EV) charging stations: Install and utilize electric vehicle (EV) charger(s) at the project site to promote the use of low or zero-emission vehicles.* • *Clean Lawn and Garden Equipment: Installation of fueling infrastructure for compressed or liquid natural gas, or hydrogen fuel cell stations to promote the use of near-zero emission vehicles.*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		• *Solar Panels: Install and utilize solar panels as a renewable energy source.* • *Clean Residential Heating Devices: Install clean residential heating devices such as certified wood burning residential fireplaces and wood stoves, natural gas fireplace inserts, or electric heat pumps.* • *Electric Outlets: This measure utilizes electrical outlets on the exterior of project buildings as necessary for sufficient powering of electric landscaping equipment.* • *Increase Density of Land-Uses: This measure encourages the siting of development projects with increased densities to reduce vehicle miles traveled (VMT) emissions and improve walkability and transit ridership in the area. Density is usually measured in terms of persons, jobs, or dwellings per unit area. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose.* • *Improve Walkability Design: This measure implements design elements into a development project that enhance walkability and connectivity. Improved street network characteristics within a neighborhood could include street accessibility, usually measured in terms of average block size, proportion of four-way intersections, or number of intersections per square mile. Examples of design implementation are sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of street trees, and a host of other physical variables that differentiate pedestrian oriented environments from auto-oriented environments.* • *Improve Pedestrian Network: This measure provides a pedestrian access network to link areas of the project site to encourage people to walk instead of drive. This mode shift could result in people driving less and thus could result in a reduction in VMT. The project could provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site. The project could minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation could be eliminated.*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		• *Provide Traffic Calming Measures: This measure is to provide traffic calming measures, which could encourage people to walk or bike instead of using a vehicle. This mode shift could result in a decrease in VMT. Project design could include pedestrian/bicycle safety and traffic calming measures more than jurisdiction requirements. Roadways could be designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips with traffic calming features. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts, or mini-circles, on street parking, planter strips with street trees, chicanes/chokers, and others.* • *Neighborhood Electric Vehicle (NEV) Network: This measure creates local "light" vehicle networks, such as NEV networks. NEVs are classified in the California Vehicle Code as a "low speed vehicle". They are electric powered and must conform to applicable federal automobile safety standards. NEVs offer an alternative to traditional vehicle trips and can legally be used on roadways with speed limits of 35 MPH or less (unless specifically restricted). They are ideal for short trips up to 30 miles in length. To create an NEV network, the project will implement the necessary infrastructure, including NEV parking, charging facilities, striping, signage, and educational tools. NEV routes can be implemented throughout the project and can double as bicycle routes.* • *Telecommuting and Alternative Work Schedule: This measure encourages telecommuting and alternative work schedules, which could reduce the number of commute trips. Alternative work schedules could take in the form of staggered starting times, flexible schedules, or compressed work weeks (e.g., 4/40, 9/80).* • *Bicycle Enhancing Infrastructure: This measure utilizes various bicycle enhancing infrastructures to reduce VMT in the project area. Some of the infrastructure design elements used include: bikeways paths connecting to a bikeway system, secure bicycle parking, provides Class I and Class II bicycle parking/storage facilities on-site and/or employee lockers and showers. Bicycle parking facilities should be near destination points and easy to find. At least one bicycle parking space for every 20 vehicle parking spaces. It also provides Class I bicycle parking at apartment complexes or condos without garages and Class I or II bike lanes on*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		arterial/collector streets, or where a suitable route exists. • *Speed Limit Signs and Erosion Control: This measure ensures speed limit signs are posted on unpaved roads limiting traffic to no more than 15 mph and ensures sandbags or other erosion control measures are installed to public roadways from sites with a slope greater than one percent. This measure should be implemented to reduce construction related PM10 impacts.* • *Clean-Air Vehicle Parking: Labeling or signage limiting parking stalls for clean-air or electric vehicles only.* • *Windblown Dust Reduction Strategies: These measures utilize the following design elements to minimize emissions from windblown dust during construction-related activities:* ▪ *On-site water sprays or other dust suppression materials* ▪ *Construct and maintain wind barriers sufficient to limit visible dust to 20% opacity on the construction site.* ▪ *Suspend excavation and grading activity when winds exceed 20 mph on the construction site.* • *Vehicle Idling Policy: This measure implements a Vehicle Idling Policy that requires all vehicles under company control to adhere to a 5-minute idling policy and/or to minimize the idling time (e.g., 5-minute maximum) for construction-related vehicles.*	
Impact 3.3-2: Proposed Project construction activities have the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan	LS	*None required.*	LS
Impact 3.3-3: The proposed Project would not generate carbon monoxide hotspot impacts.	LS	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.3-4: The proposed Project has the potential for public exposure to toxic air contaminants.	LS	*None required.*	LS
Impact 3.3-5: The proposed Project would not cause exposure to other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LS	*None required.*	LS
BIOLOGICAL RESOURCES			
Impact 3.4-1: The proposed Project has the potential to result in adverse effects on special-status species and their habitat.	PS	***Mitigation Measure 3.4-1****: If groundbreaking on any project phase or sub-phase occurs after 2025, the applicant will retain a qualified biologist/botanist who is familiar with the rare plants of the project region to conduct an additional round of protocol-level rare plant surveys. Surveys will be conducted consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (California Department of Fish and Wildlife 2018) or most current equivalent.* *Surveys will be conducted prior to construction, with enough lead time to allow for consultation with CDFW (and, if appropriate, USFWS) and additional follow-up actions, if they are warranted. Surveys will be conducted during the peak blooming periods of the target species and will cover all potentially suitable habitats within the project site.* *If no special-status plants are documented within the area to be disturbed for project construction (including staging and access), no further action is required.* *If any listed plant species, or any plant species assigned to CRPR 1 or 2, is found to be present, the following measures will be implemented, at a minimum. With prior written approval from CDFW—and, if federally listed species are involved, USFWS—equally protective measures may be substituted. The applicant will be responsible for implementing all measures.* • *The occurrence(s) will be avoided and protected in place whenever it is possible to do so* • *If the occurrence(s) cannot be entirely avoided, a Plant Salvage and Mitigation Plan will be prepared and implemented. The Plan will be prepared by a qualified biologist/botanist who is familiar with the rare plants of the project region and has*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		experience conducting rare plant salvage operations. The plan will be subject to CDFW (and, if federally listed species are involved, USFWS) approval, and will, at a minimum, include the following – *Quantity and species of plants to be planted or transplanted* – *Location of the mitigation/transplant site(s), which will be suitable to the species involved and within the species' known geographic range(s)* – *Salvage methods, such as relocation/transplantation, seed collection, etc., including storage locations and methods to preserve the plants* – *Procedures for propagating collected seed, including storage methods* – *Planting procedures, including any use of soil preparation and irrigation* – *Schedule and action plan to maintain and monitor the mitigation/transplant site for a minimum 3-year period following transplantation* – *Interim and final success criteria and corrective action thresholds, including growth, plant cover, and minimum survivorship of the transplanted species* – *Corrective actions/contingency measures in the event interim success criteria are not being met (e.g., weed removal, supplemental irrigation, supplemental plantings, etc.)* – *Reporting requirements and procedures, including the contents of annual progress reports, report submittals, review/approval responsibilities, etc.* *The Plan will be implemented under the oversight of the biologist/botanist who prepared it or another individual with equivalent qualifications.* ***Mitigation Measure 3.4-2:*** *The applicant will require all construction personnel to undergo Worker Awareness Training that provides information on* • *the sensitive habitats on the project site* • *special-status species known and potentially present on the site, including their* – *listing status and causes of decline*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		– *habitat preferences* – *distinguishing physical characteristics* • *the measures (AMMs, permit conditions, and CEQA mitigation) required to protect sensitive habitats and special-status species, including avoidance of delineated exclusion areas, and next steps and notifications in the event of a special-status species sighting* *The training will include a hard copy handout that summarizes the information presented and includes photographs of habitat resources and species to facilitate identification in the field by construction personnel. A readily available copy of the AMMs, permit conditions, and CEQA mitigation will be maintained by the construction foreman on the construction site for reference.* *The applicant will ensure that all construction personnel undergo Worker Awareness Training before beginning work on the site. Training will be delivered by a qualified biologist experienced in the Fresno County/San Joaquin Valley area, and will be provided bilingually in English and Spanish if appropriate. Upon completion of training, employees will sign a form stating that they attended the training and understand all of the required CEQA mitigation and permit conditions. Signed forms will be submitted to CDFW and USFWS.* ***Mitigation Measure 3.4-3:*** *The MPArea 1 applicant will complete the state ITP and Clean Water Act Section 404 permitting processes and will obtain the necessary permits from CDFW and the Corps. The applicant will then be responsible for implementing all permit conditions relative to California tiger salamander (CTS), including AMMs and habitat compensation. Purchase of mitigation Property, establishment of the necessary conservation easements, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.* *The following measures will be required. If, via the state ITP process or the federal interagency consultation process, CDFW and/or USFWS issue alternate requirements that would be equally or more protective, those will be substituted.* • *The applicant will develop a CTS Relocation Plan, prepared by a qualified biologist and subject to approval by CDFW and USFWS. The Relocation Plan will include specific areas to which the designated qualified biologist may relocate individual CTS that are*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		at risk from project-related activities. It will also include provisions for the biologist to monitor the translocated animal until it is determined that it is not at risk from predators or other factors. CTS will be relocated to appropriate habitat for their stage in the life cycle; for example, CTS found in burrows will be relocated to burrows and not to aquatic habitat • *If a known or potential CTS individual is encountered during any project-related activity, the following requirements will apply.* – *All work that could result in direct injury or disturbance of the individual animal will cease immediately* – *The foreman and on-call biologist will be notified immediately* – *The biologist will take appropriate action to secure the individual (relocation per the Relocation Plan, and/or veterinary care if appropriate), and will then notify CDFW, USFWS, and the applicant via telephone or email* *The applicant will appoint a representative to act as the contact for the biologist, to receive notifications of CTS encounters. The representative will be identified during the Worker Awareness Training program, and their name and contact information will be provided to CDFW and USFWS* • *An Herbicide Use Plan will be drawn up prior to the onset of development activities, and will be subject to CDFW and USFWS approval before work on each phase begins. The plan will allow no more than two applications of herbicide per year during development activities. Herbicides will be used only in a manner that avoids primary or secondary poisoning of CTS and the prey populations on which they depend within the phase footprint. All uses of such compounds will comply with label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other appropriate state and federal regulations, as well as any other additional project-specific restrictions required by CDFW and/or USFWS* • *Prior to ground disturbance for each phase or sub-phase (defined as major earthwork associated with rough grading, lot leveling, infrastructure construction, and street*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		improvements; not including construction of individual homes on previously graded pads), the disturbance areas will be subject to the following measures to protect CTS. These measures will be in force for the duration of ground-disturbing activities, under the oversight of a qualified biologist. After the completion of initial ground-disturbing activities for each phase or sub-phase, the qualified biologist will continue to be available by phone and will be on call to visit the project site as needed throughout phase construction. The biologist's contact information will be provided to CDFW and USFWS – *First, individual sub-phases or disturbance areas will be identified within each project phase. Sub-phases will be defined with the input of a qualified biologist such that no undisturbed areas of potential CTS habitat are surrounded or cut off from other CTS habitat as a result of ground disturbance and/or implementation of other AMMs such as wetland exclusion areas. Instead, sub-phases will be developed such that the most direct route from any given patch of potential CTS habitat onsite to the nearest accessible offsite CTS habitat remains open until the onsite patch has been subject to relocation measures, described below. Multiple, or even all, sub-phases may be active concurrently, but no portion of the project or phase site will be disturbed until after CTS relocation and other AMMs have been undertaken on it* – *Following survey and relocation of individuals, exclusion barrier will be installed at the limits of grading for the phase or sub-phase to prevent CTS from reentering the disturbance area. The materials and installation methods for the exclusion barrier will be subject to approval by CDFW and USFWS, and the barrier will be installed under biologist oversight. The exclusion barrier will be inspected weekly and maintained and repaired as necessary to ensure that it is functional and not a hazard to any CTS on the outside of the barrier. The barrier will remain in place until the completion of major ground-disturbing activities within the phase or sub-phase it encompasses* – *Once visual surveys, relocation, and exclusion barrier installation have been completed, the disturbance area may be subject to initial ground-disturbing activities (vegetation clearing, grubbing, scraping, grading, trenching, and other activities that will convert potential CTS upland habitat to non-habitat*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		through the disruption of onsite rodent burrows) – *A qualified biologist will be onsite to monitor vegetation clearing, grubbing, and rough grading, until or unless the biologist determines that monitoring is no longer necessary. The biologist(s) will have authority to stop any work that may result in the take of CTS, and to ensure the adherence to all required AMMs. CDFW, USFWS, and the Corps will be notified of any "stop-work" orders issued by the biologist(s)* • *The following requirements will apply in areas that have not been "cleared" for CTS and enclosed in exclusion barrier* – *A qualified biologist will be onsite to monitor all work. The biologist(s) will have authority to stop any work that may result in the take of CTS, and to ensure adherence to all required AMMs. CDFW, USFWS, and the Corps will be notified of any "stop-work" orders issued by the biologist(s)* – *Work will be prohibited when the National Weather Service 72-hour forecast predicts a 70% or greater chance of rainfall; work may resume 24 hours following the cessation of rainfall, if 0% chance of rain is predicted in the next 72 hours* – *Because CTS may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped, all pipes, culverts, and similar structures that are stored at the project site for one or more overnight periods will either be securely capped prior to storage or will be thoroughly inspected by the authorized on-call biologist and/or the construction foreman/manager for CTS before the pipe moved, capped, buried, or otherwise used or moved in any way* – *To prevent inadvertent entrapment of CTS during development, the on-call biologist and/or construction foreman/manager will ensure that all steep-walled excavations and trenches more than 1 foot deep are completely covered at the close of each working day by plywood or similar materials or are provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the on-call biologist. Before excavations or trenches are filled, they will be thoroughly inspected for trapped animals by the on-call biologist and/or*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		construction foreman/manager • *The following requirements will apply on all parts of the project site (within and outside CTS exclusion barrier)* – *Project-related vehicles will observe a 15 mile-per-hour offroad speed limit* – *Erosion control measures will employ tightly woven fiber netting or similar material to reduce the potential for CTS entrapment. This limitation will be communicated to all contractors through the use of Special Provisions included in the bid solicitation package. No plastic monofilament netting (erosion control matting) or similar materials will be used* – *No insecticides or rodenticides will be used in construction or development areas as part of the project development process* – *To reduce the potential that predators of CTS will be attracted to the site, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the construction site* ***Mitigation Measure 3.4-4:*** *The MPArea 1 development applicant will complete the state ITP permitting process and will obtain the necessary permits from CDFW. The applicant will then be responsible for implementing all permit conditions relative to San Joaquin kit fox (SJKF), including AMMs and habitat compensation. Purchase of mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to ground disturbance.* *The following AMMs will be required, unless CDFW issues written concurrence that SJKF is not present in the MPArea 1 vicinity; in this case no further action regarding SJKF will be required. If, via the state ITP process, CDFW issues alternate requirements that would be equally or more protective of the species, those will be substituted.* • *Prior to ground disturbance for each phase or sub-phase (defined as major earthwork associated with rough grading, lot leveling, infrastructure construction, and street improvements; not including construction of individual homes on previously graded*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		pads), the applicant will retain a qualified biologist to survey the project area and a 500-foot-wide buffer for the presence of potential dens and other SJKF sign. The survey buffer will extend to the boundary of property to which the applicant has legal access; survey of property owned/controlled by others will not be required. Potential and confirmed dens will be GPS-located and mapped. Surveys will be conducted no more than 30 days prior to the start of work, and results will be submitted to CDFW and USFWS within 10 days of survey completion • *If no sign of SJKF presence is observed, no further action will be required* • *If SJKF is observed onsite or within 500 feet of the work area, work will be delayed until the biologist has confirmed that all kit fox have left the survey area of their own volition* • *Additionally, if sign of SJKF is detected, a qualified biologist will be available onsite during all project-related activities that could impact the species such as vehicle or equipment traffic, materials storage, equipment staging, and excavation, grading, and other ground-disturbing activities that could damage or remove dens or rodent burrows* • *If SJKF dens are found, they will be buffered and avoided as follows.* – *Potential or atypical den: 50 feet* – *Occupied den: 100 feet* – *Occupied pupping/natal den: 500 feet* *Avoidance buffers will be delineated in the field under the supervision of the biologist, using temporary consruction fencing or another appropriate low-impact medium. No entry of personnel, equipment, or materials will be permitted into the den buffers* • *If any occupied SJKF pupping dens are discovered once work has begun, work within 500 feet of the den(s) will be suspended, and the applicant will immediately contact the biologist, who will consult with CDFW and USFWS for further guidance* • *Absolutely no disturbance to known occupied SJKF dens will be allowed, and no work will occur within the above buffers without written authorization from CDFW and USFWS, which it is understood may entail additional conditions and/or limitations*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		Mitigation Measure 3.4-5: *The MPArea 1 development applicant will complete the state ITP and Clean Water Act Section 404 permitting processes and will obtain the necessary permits from CDFW and the Corps. The applicant will then be responsible for implementing all permit conditions relative to Crotch's bumble bee, including AMMs and habitat compensation. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.* *At a minimum, the following AMMs will be required. If, via the state ITP process or the federal interagency consultation process, CDFW and/or USFWS issue alternate requirements that would be equally or more protective, those will be substituted.* • *No more than 1 year prior to the initiation of vegetation removal and grading at the project site, the applicant will retain an appropriately qualified biologist (see next paragraph) to conduct surveys for Crotch's bumble bee* • *Surveys will be performed by a qualified entomologist familiar with the species' behavior and life history and will include both habitat evaluations and foraging bee surveys consistent with the recommendations in Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee. Surveys will be conducted during the peak worker activity period for Crotch's bumble bee (April 1 – July 31; Williams et al. 2014) and will cover all areas of onsite habitat determined by the biologist to be suitable for the species, based on habitat mapping conducted for the project to date and observations on the site at the time of survey. A minimum of 3 – 4 surveys will be conducted, spaced 2 weeks apart; the total number, timing, and duration of surveys performed will depend on the biologist's judgment, in consideration of weather, site conditions, and current CDFW recommendations/protocols* • *If no Crotch's bumble bee individuals are observed onsite, and no sign of the species' presence is detected, during the surveys, no further action will be required* • *If Crotch's bumble bee is observed onsite during the surveys, an additional survey or surveys will be conducted to determine whether a nest or colony is present, unless the biologist is satisfied that the initial survey(s) were sufficient to rule out the presence of*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		nests/colonies • *If a nest or colony is present onsite, the biologist will establish an appropriate avoidance buffer determined in consideration of site conditions and the construction activities planned prior to the close of the nesting season. No entry into the buffer will be permitted. The buffer will be delineated in the field using orange construction fencing or another appropriate medium, under the biologist's oversight, and will remain in place until the end of the Crotch's bumble bee gyne flying season (February 21 – August 7; Williams et al. 2014), or until the biologist determines that the nest has been abandoned* • *If no nest/colony is present onsite, no further action need be taken* • *To support improved understanding and conservation of Crotch's bumble bee, survey results, including negative findings, will be submitted to CDFW before project-related ground disturbance begins. At a minimum, the survey report will include the following information* *(1) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee* *(2) Field survey conditions, including name(s) of qualified entomologist(s) and brief qualifications; date(s) and time(s) of survey; survey duration; general weather conditions; survey goals; and species searched* *(3) Map(s) showing the location of nests/colonies, if any* *(4) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found, including native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species)* *(5) The measures that will be implemented to avoid adverse effects on the bumble bee species present (AMMs)* *(6) An assessment of potential effects on special-status bumble bees during project construction and project operation/maintenance, with AMMs in*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		place • *Additionally, all workers will be required to avoid injury and mortality to bumble bees they may encounter; this requirement will be discussed during the Worker Awareness Training required for all construction personnel, and will be reiterated to all workers if special-status bumble bees are confirmed onsite* ***Mitigation Measure 3.4-6****: The MPArea 1 development applicant will complete the Clean Water Act Section 404 permitting process and will obtain the necessary permit from the Corps. The applicant will then be responsible for implementing all permit conditions and USFWS BO conditions relative to vernal pool fairy shrimp (VPFS), including AMMs and habitat compensation. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.* ***Mitigation Measure 3.4-7:*** *The MPArea 1 development applicant will complete the Clean Water Act Section 404 permitting process and will obtain the necessary permit from the Corps. The applicant will then be responsible for implementing all permit conditions and USFWS BO conditions relative to western spadefoot, including AMMs and habitat compensation. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.* *At a minimum, all AMMs identified in Mitigation Measure 3.4-3 for CTS will also be required for western spadefoot. Surveys, relocation efforts, and activities related to exclusion barriers will be combined where feasible to increase efficiency and effectiveness. If, via the federal interagency consultation process, USFWS issues alternate requirements that would be equally or more protective, those will be substituted.* *If western spadefoot does not become listed under the federal Endangered Species Act and the federal BO and Clean Water Act Section 404 permit do not prescribe other requirements, the requirements of Mitigation Measure 3.4-9 may be substituted. In this case, surveys and, if warranted, relocation of individuals, will be conducted consistent with agency guidance current at the time of survey, and with prevailing best conservation practices.* ***Mitigation Measure 3.4-8:*** *The MPArea 1 development applicant will complete the Clean Water Act Section 404 permitting process and will obtain the necessary permit from the*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		Corps. The applicant will then be responsible for implementing all permit conditions and USFWS BO conditions relative to western pond turtle, including AMMs and habitat compensation. Purchase of any mitigation property, establishment of any necessary conservation easement, and finalization of any agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance. *If western pond turtle does not become listed under the federal Endangered Species Act and the federal BO and Clean Water Act Section 404 permit do not prescribe other requirements, the requirements of Mitigation Measure 3.4-9 may be substituted. In this case the applicable guidance will be Draft USGS Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (U.S. Geological Survey 2006).* ***Mitigation Measure 3.4-9:** Prior to construction in each of the MPArea 1 phases, the applicant will retain a qualified biologist/ecologist with experience in the Fresno County area to conduct comprehensive preconstruction surveys for special-status wildlife. Surveys will be timed to allow follow-up such as relocation of individuals and/or consultation with resource agency staff if warranted. Surveys will be designed and implemented in consideration of the particular species with potential to be present; survey methods will be consistent with prevailing best practices by species and consistent with current applicable agency guidance, including but not necessarily limited to the following, currently available at https://wildlife.ca.gov/Conservation/Survey-Protocols (or updated versions thereof).* *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (California Department of Fish and Wildlife 2023b)* • *Draft USGS Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (U.S. Geological Survey 2006)* • *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015 (California Department of Fish and Wildlife 2015)* • *Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012)* • *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000) • *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or during Ground Disturbance (U.S. Fish & Wildlife Service 1999)* *If no special-status wildlife or sign thereof is observed during the surveys, no further action is required.* *If listed or candidate species or sign(s) thereof are observed onsite, the applicant will consult with CDFW and/or USFWS (depending on the species' listing status), and will proceed in accordance with agency direction.* *If non-listed species that qualify for another form of special status in California, or sign(s) thereof, are observed onsite, the applicant will consult with CDFW and proceed in accordance with CDFW direction.* *Follow-up actions for common (non-listed/non-special-status) species will be consistent with the biologist's professional judgment and current prevailing conservation best practices.* ***Mitigation Measure 3.4-10:** At a minimum, the following precautions will be required to protect CESA-listed bird species whose presence cannot be ruled out, as well as other special-status birds, and common species protected under the California Fish and Game Code and/or the federal Migratory Bird Treaty Act. The applicant will be responsible for implementing all measures. With prior written approval from CDFW—and, if federally protected species are involved, USFWS—equally protective measures may be substituted.* • *If vegetation removal or trimming, clearing/grubbing, or grading for any project phase or sub-phase commences during the nesting/breeding season of native bird species potentially nesting on or near the work site (February 1 – September 15), the applicant will retain a qualified biologist to conduct a preconstruction survey for nesting birds. The survey will employ binoculars and will take place no more than 2 weeks prior to the initiation of work. If work is suspended for more than 1 week during the nesting season, re-survey will be required before work is reinitiated* • *If no active nests are documented and no nest-building activity is observed within the area to be disturbed for project construction (including staging and access), no further action is required*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		• *If nest-building activity is observed or active nests are found in areas that could be directly affected by project activities, or in locations where they could be disturbed by construction activity and noise, the following measures will be implemented, at a minimum* – *No-disturbance buffer zone(s) will be established for nest protection. Buffers will remain in place for the remainder of the nesting season or until the biologist determines that all young have fledged or that the nest has been abandoned. No entry of personnel, equipment, or materials into the no-activity buffer will be permitted without authorization from CDFW (and if federally protected species are involved, USFWS)* – *Buffers will be delineated in the field by or under the supervision of the biologist, using temporary construction fencing or another suitable low-impact medium. The size of the buffer zone(s) will be determined by the biologist based on the species involved, their behavior, the amount of vegetative and other screening between the nest and the locations(s) where potentially disturbing activities will be occurring, and, if appropriate, other site-specific factors. The minimum buffer widths will be as follows* o 500 feet for raptors other than Swainson's Hawk; 0.5 mile for Swainson's Hawk o 300 feet for Tricolored Blackbird o 50 feet for all other species, unless modified by the biologist based on site-specific observations – *Buffers may be enlarged by taking into account factors such as the following* o Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity o Sensitivity of the nesting species and behaviors of the individual nesting birds	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

		Mitigation Measure 3.4-11: *Planning for the mitigation preserve proposed to compensate for losses of special-status species habitat will take into account project impacts on Swainson's Hawk foraging habitat within MPArea 1 and will be guided by current CDFW mitigation ratios for losses of Swainson's Hawk habitat. Final preserve boundaries will be subject to CDFW approval, as enforced through the state ITP process and Mitigation Measure 3.4-3. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.* ***Mitigation Measure 3.4-12:*** *As part of the development planning process(es) for MPArea 2 and the Non-Development Area, the applicant(s) will retain a qualified biologist or biologists to conduct a comprehensive biological resources evaluation (BRE) of the proposed development area(s) and surrounding vicinity. Coverage of the surrounding area will be determined by the biologist(s) based on the best available conservation science for the species with potential to be present, and will be inclusive enough to detect all species with the potential to be affected by disturbance (e.g., due to construction activity) as well as habitat degradation and loss.* *The BRE(s) will address, at a minimum, the following:* • *Types of habitat present and habitat quality* • *Presence of sensitive natural communities, if any* • *Presence of wildlife migration or movement corridors, if any* • *Presence of wildlife nursery sites, if any* • *Presence, and potential for presence, of special-status plants* • *Presence, and potential for presence, of special-status fish and wildlife species, including state- and/or federally listed species, as well as species that qualify for other forms of special status under CEQA* • *General information on location, extent, and quality of potentially jurisdictional wetlands and other waters on and near the site* • *Resource agency permits/authorizations that may or will be required to authorize development activities* • *Need for, and topics to be covered in, construction worker awareness training for biological resources, sensitive habitats, jurisdictional resources, and special-status*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		species *If appropriate in the judgment of the biologist(s), the BRE will recommend follow-up steps, potentially including but not necessarily limited to:* • *Further non-protocol studies of habitat, plants, and wildlife at the site* • *Protocol-level surveys for special-status plants, conducted in a manner consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (California Department of Fish and Wildlife 2018) or most current equivalent.* • *Protocol-level surveys for special-status wildlife, conducted in a manner consistent with species-specific protocols adopted by CDFW and/or USFWS and current at the time of survey* • *Consultation with state and/or federal resource agencies if listed or candidate species are involved* • *Measures to avoid, reduce, and compensate for impacts on biological and jurisdictional resources in general, including sensitive natural communities, wildlife movement/migratory corridors, and wildlife nursery sites, consistent with current best conservation science and practices* • *Measures to avoid, reduce, and compensate for impacts on special-status species and their habitat, consistent with adopted CDFW and/or USFWS protocols current at the time of project entitlement* *The applicant(s) will be responsible for implementing follow-up measures recommended in the BRE, and for obtaining any resource agency permits required to authorize development activities (e.g., state ITP, etc.). The applicant(s) will also be responsible for implementing any permit conditions required by the resource agencies. Permit conditions required by the agencies shall be legally binding. Purchase of any mitigation property, establishment of any necessary conservation easement(s), and finalization of any agreements for long-term maintenance and management responsibilities shall be completed prior to project ground disturbance.* *The City will ensure that the recommended measures to avoid, reduce, and compensate for*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		impacts on biological and jurisdictional resources in general, and on special-status species and their habitat—or equally effective alternate measures based on current conservation science—are included as Conditions of Approval for the proposed development. ***Mitigation Measure 3.4-13:*** *If vegetation removal or trimming, clearing/grubbing, excavation, or grading is to begin during the bird nesting/breeding season (February 1 – September 15), the applicant will retain a qualified biologist to conduct a preconstruction survey for nesting birds. The survey will employ binoculars and will take place no more than 2 weeks prior to the initiation of work. If work is suspended for more than 1 week during the nesting season, re-survey will be required before work is reinitiated.* *If any active nest is found, or nest-building activity is observed, in an area that could be directly affected by project activities, or in a location potentially subject to construction-related disturbance, a no-disturbance buffer zone(s) will be established for nest protection. Buffers will remain in place for the remainder of the nesting season or until the biologist determines that all young have fledged or that the nest has been abandoned. No entry of personnel, equipment, or materials into the no-activity buffer will be permitted without written authorization from CDFW (and if federally protected species are involved, USFWS).* *Buffers will be delineated in the field by or under the supervision of the biologist, using temporary construction fencing or another suitable low-impact medium. The size of the buffer zone(s) will be determined by the biologist based on the species involved, their behavior, the amount of vegetative and other screening between the nest and the locations(s) where potentially disturbing activities will be occurring, and, if appropriate, other site-specific factors. The minimum buffer widths will be as follows:* • *500 feet for raptors other than Swainson's Hawk; 0.5 mile for Swainson's Hawk* • *60 feet for Tricolored Blackbird* • *50 feet for all other species, unless modified by the biologist based on site-specific observations, as follows* *Buffers may be enlarged by taking into account factors such as the following:* • *Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		• *Sensitivity of the nesting species and behaviors of the individual nesting birds*	
Impact 3.4-2: Nighttime lighting associated with the Project has the potential for adverse effects on wildlife.	PS	***Mitigation Measure 3.4-14:*** *The following measures will be required of all development in the Project area to avoid and reduce impacts of nighttime lighting and fugitive light/glare on wildlife. Development applicants will be responsible for implementing all measures; the City will enforce measures as Conditions of Approval under the entitlements process. With prior written approval from CDFW and USFWS, equally protective measures may be substituted.* • *No lighting will be installed in protected open space areas; lighting on parcels adjacent to open space—whether protected or not—will be limited to the minimum needed for public safety* • *Public exterior lighting will be equipped with full cut-off shielded luminaires to reduce light spill* • *Use of uplights on buildings will be prohibited, and use of uplighting in general will be discouraged, with the exception of low-voltage, low-lumen output uplighting on trees in public spaces* • *Exterior light fixtures in both public and private spaces will be mounted as low as possible while still providing for safety* • *Lighting sources will be restricted to those that provide good color rendering such as light-emitting diodes (LEDs) and metal halide lamps; no use of high- or low- pressure sodium lamps or mercury vapor lamps will be permitted*	LS
Impact 3.4-3: The proposed Project has the potential to result in adverse effects on sensitive natural communities.	PS	***Mitigation Measure 3.4-15:*** *Sensitive natural communities—i.e., natural communities/vegetation types ranked S1 – S3 in CDFW's California Natural Community List and any identified in local or regional planning documents as sensitive and meriting protection—will be avoided and protected in place where this is possible without significant loss of habitat function and value. If losses cannot be avoided, or if habitat value would be substantially decreased due to loss of connectivity or proximity to proposed development, compensatory habitat mitigation will be required. Mitigation will be provided by the development applicant, in a manner consistent with current prevailing conservation practice and any applicable CDFW guidelines. Mitigation commitments will be enforced by the City as Conditions of Approval for development.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.4-4: The proposed Project has the potential to result in adverse effects on wetlands.	PS	***Mitigation Measure 3.4-16:*** *In addition to Clean Water Act Section 404 permitting as required by Mitigation Measure 3.4-3, the MPArea 1 development applicant will complete the Clean Water Act Section 401 permitting process and will enter into a Streambed Alteration Agreement with CDFW per California Fish and Game Code Section 1602, and will obtain the necessary aquatic resources permits from the Corps, RWQCB, and CDFW. The applicant will then be responsible for implementing all permit conditions relative to jurisdictional wetlands and other waters, including AMMs and habitat compensation.* ***Mitigation Measure 3.4-17:*** *If the Biological Resources Evaluation (BRE) conducted under Mitigation Measure 3.4-12 identifies the presence of wetlands or other waters within either MPArea 2 or the Non-Development Area, the applicant(s) proposing development will be required to* • *retain a qualified biologist/ecologist to conduct a preliminary delineation of potentially jurisdictional wetlands and other waters on the development site, consistent with current applicable Corps standards* • *obtain Corps verification of the preliminary jurisdictional delineation; either Approved Jurisdictional Determination (AJD) or Preliminary Jurisdictional Determination (PJD) is acceptable* • *avoid wetlands and other waters to the extent feasible during development; if impacts on wetlands and other waters cannot be entirely avoided to the satisfaction of the regulatory agencies (Corps, RWQCB, and/or CDFW), obtain aquatic resources permits to authorize impacts on wetlands/waters as a result of development; and* • *provide mitigation consistent with resource agency requirements identified and enforced through the permit process* *These requirements will be enforced by the City as Conditions of Approval for all development within MPArea 2 and the Non-Development Area.*	LS
Impact 3.4-5: The proposed Project has the potential for result in adverse effects on wildlife movement or migratory wildlife corridors.	LS	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.4-6: The proposed Project has the potential to impede the use of wildlife nursery sites.	PS	*Reference Mitigation Measures 3.4-3. 3.4-6, and 3.4-7.*	LS
Impact 3.4-7: The proposed Project has the potential to conflict with local policies or ordinances protecting biological resources.	LS	*None required.*	LS
Impact 3.4-8: The proposed Project has the potential to conflict with an adopted conservation plan.	LS	*None required.*	LS
CULTURAL AND TRIBAL RESOURCES			
Impact 3.5-1: Project implementation has the potential to cause a substantial adverse change to a significant historical or archaeological resource, as defined in CEQA Guidelines §15064.5	PS	***Mitigation Measure 3.5-1**: If subsurface deposits believed to be cultural, historical, archaeological, tribal, and/or human in origin are discovered during construction and/or ground disturbance, all work must halt within a 100-foot radius of the discovery. A Native American Representative from traditionally and culturally affiliated Native American Tribes that requested consultation shall be immediately contacted and invited to assess the significance of the find and make recommendations for further evaluation and treatment, as necessary. If deemed necessary by the City, a qualified cultural resources specialist meeting the Secretary of Interior's Professional Qualifications Standards for Archaeology, may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work at the discovery location cannot resume until it is determined by the City, in consultation with culturally affiliated tribes, that the find is not a tribal cultural resource, or that the find is a tribal cultural resource and all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied. The qualified cultural resources specialist shall have the authority to modify the no-work radius as appropriate, using professional judgement.* *The following notifications and measures shall apply to potential unique archaeological resources and potential historical resources of an archaeological nature (as opposed to tribal cultural resources), depending on the nature of the find:* • *If the professional archaeologist determines that the find does not represent a cultural resource that might qualify as a unique archaeological resource or historical resource of an archaeological nature, work may resume immediately and no agency*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		notifications are required. • *If the professional archaeologist determines that the find does represent a cultural resource that might qualify as a unique archaeological resource or historical resource of an archaeological nature from any time period or cultural affiliation, he or she shall immediately notify the City and applicable landowner. The professional archaeologist and a representative from the City shall consult to determine whether any unique archaeological resources or historical resources of an archaeological nature are present, in part based on a finding of eligibility for inclusion in the NRHP or CRHR. If it is determined that unique archaeological resources or historical resources of an archaeological nature are present, the qualified archaeologist shall develop mitigation or treatment measures for consideration and approval by the City. Mitigation shall be developed and implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), preservation in place may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If approved by the City, such measures shall be implemented and completed prior to commencing further work for which grading or building permits were issued, unless otherwise directed by the City. Avoidance or preservation of unique archaeological resources or historical resources of an archaeological nature shall not be required where such avoidance or preservation in place would preclude the construction of important structures or infrastructure or require exorbitant expenditures, as determined by the City. Where avoidance or preservation are not appropriate for these reasons, the professional archaeologist, in consultation with the City, shall prepare a detailed recommended a treatment plan for consideration and approval by the City, which may include data recovery. If employed, data recovery strategies for unique archaeological resources that do not also qualify as historical resources of an archaeological nature shall follow the applicable requirements and limitations set forth in Public Resources Code Section 21083.2. Data recovery will normally consist of (but would not be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim of recovering important scientific data contained within the unique archaeological resource or historical resource of an archaeological nature. The data recovery plan*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and State repositories, libraries, and interested professionals. If data recovery is determined by the City to not be appropriate, then an equally effective treatment shall be proposed and implemented. Work may not resume within the no-work radius until the City, in consultation with the professional archaeologist, determines that the site either: 1) does not contain unique archaeological resources or historical resources of an archaeological nature; or 2) that the preservation and/or treatment measures have been completed to the satisfaction of the City. • *If the find includes human remains, or remains that are potentially human, the contractor shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the County Coroner (per §7050.5 of the Health and Safety Code). The provisions of §7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, then the Coroner will notify the Native American Heritage Commission, which then will designate a Native American Most Likely Descendant (MLD) for the project (§5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, then the NAHC can mediate (§5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the treatment measures have been completed to their satisfaction.*	
Impact 3.5-2: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries.	PS	*Reference Mitigation Measure 3.5-1*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.5-3: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or a resource determined by the lead agency.	PS	*Reference Mitigation Measure 3.5-1*	LS
GEOLOGY AND SOILS			
Impact 3.6-1: The proposed Project may expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides.	LS	*None required.*	LS
Impact 3.6-2: Implementation and construction of the proposed Project may result in substantial soil erosion or the loss of topsoil.	LS	*None required.*	LS
Impact 3.6-3: The proposed project has the potential to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of project implementation, and potentially result in landslide, lateral spreading, subsidence, liquefaction or collapse.	LS	*None required*	LS
Impact 3.6-4: The proposed Project has the potential to result in development 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.	LS	*None required*	LS
Impact 3.6-5: The proposed Project does not have the potential to have soils incapable of adequately supporting the use of septic tanks or	LS	*None Required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
alternative waste water disposal systems where sewers are not available for the disposal of waste water			
Impact 3.6-6: The proposed Project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	PS	***Mitigation Measure 3.6-1****: Prior to approval of a grading permit, the Project proponent shall ensure that grading and improvement plans include the following note: "If any paleontological resources are found during grading and construction activities of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until a qualified paleontologist has evaluated the find. Work shall not continue at the discovery site until the paleontologist evaluates the find and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including preserving in place or relocating on the Project site, if feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology."*	LS
Impact 3.6-7: The proposed Project has the potential to result in the loss of availability of a locally-important mineral resource recovery site or known mineral resource of value to the region and the residents of the state.	LS	*None required.*	LS
GREENHOUSE GASES, CLIMATE CHANGE AND ENERGY (This project will comply with all existing regulations, rules, standards, and specifications that are already in place, including from SJVAPCD, CARB, etc.)			
Impact 3.7-1: Project implementation would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	LS	*None Required.*	LS
Impact 3.7-2: Project implementation would not result in the inefficient, wasteful, or unnecessary use of energy resources.	LS	*None required.*	LS
HAZARDS AND HAZARDOUS MATERIALS			

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.8-1: Potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	PS	***Mitigation Measure 3.8-1:*** *Prior to the acceptance of improvements, the Project proponent shall hire a licensed well contractor to obtain a well abandonment permit from Fresno County Department of Public Health Environmental Health Division, and properly abandon the on-site domestic water wells, septic and leach field system, propane fuel tanks, and irrigation and well pump, pursuant to review and approval of the City Engineer and the Fresno County Department of Public Health Environmental Health Division.* ***Mitigation Measure 3.8-2:*** *Prior to any grading or construction activities in the vicinity of the Contractor's Corp Yard, removal of the eight-foot by eight-foot UST, including any associated pipes or wires, shall be undertaken in accordance with all applicable local, state and federal regulations.* ***Mitigation Measure 3.8-3:*** *The Project proponent shall hire a qualified consultant to perform additional testing prior to the issuance of grading permits for construction activities in the following areas that have been deemed to have potentially hazardous conditions present:* • *Prior to the disturbance of any suspect ACMs or LBP at the subject site, via renovation or demolition, comprehensive ACM and LBP surveys are required.* • *During the removal of debris from the site in preparation for grading and construction activities associated with the proposed residential development, should indications of potential hazardous materials or evidence of impacted soil be observed, the Applicant would be contracted to determine whether surficial soils have been potentially impacted and whether sampling would be recommended. In addition, debris should be removed and transported off-site for proper disposal.* • *Prior to any grading or construction activities in the MPArea 2, a Phase I ESA should be undertaken to characterize the site.*	LS
Impact 3.8-2: Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LS	*None required.*	LS
Impact 3.8-3: Potential to result in impacts from	PS	*Reference Mitigation Measures 3.8-1, 3.8-2 and 3.8-3.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.			
Impact 3.8-4: The Project is not located within an airport land use plan, two miles of a public airport or public use airport and, would not result in a safety hazard for people residing or working in the project area.	LS	*None required.*	LS
Impact 3.8-5: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LS	*None required.*	LS
Impact 3.8-6: Potential to expose people or structures to a risk of loss, injury or death from wildland fires.	LS	*None required.*	LS
HYDROLOGY AND WATER QUALITY (This project will comply with all existing regulations, rules, standards, and specifications that are already in place, including from FID, FMFCD, RWQCB, etc.)			
Impact 3.9-1: The proposed Project has the potential to violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	LS	*None required.*	LS
Impact 3.9-2: The proposed Project has the potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin	LS	*None required.*	LS
Impact 3.9-3: The proposed Project has the potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream	LS	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 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 impede or redirect flood flows.			
Impact 3.9-4: The proposed Project has the potential to, in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation.	LS	*None required.*	LS
Impact 3.9-5: The proposed Project has the potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LS	*None required.*	LS
LAND USE AND POPULATION			
Impact 3.10-1: The proposed Project would not physically divide an established community.	LS	*None required.*	LS
Impact 3.10-2: The proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect.	LS	*None required.*	LS
Impact 3.10-3: The proposed Project would not induce substantial population growth in an area.	LS	*None required.*	LS
Impact 3.10-4: The proposed Project would not displace substantial numbers of people or existing housing.	LS	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
NOISE			
Impact 3.11-1: Operational Noise- The proposed Project has the potential to generate 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.	PS	***Mitigation Measure 3.11-1:*** *A six-foot-tall barrier shall be constructed along all unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue, to achieve the City's exterior noise standards. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials that achieve the required total height. Wood shall not be used due to eventual warping and degradation of acoustical performance. These walls must be at least 4.2 lbs/ft. These requirements shall be included in the improvements plans prior to their approval by the City's Public Utilities Department.* ***Mitigation Measure 3.11-2:*** *The Project developer will ensure that any unshielded residential glass facades within 80 feet of the centerline of Shepherd Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.*	LS
Impact 3.11-2: Construction Noise- The proposed Project has the potential to generate 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.	PS	***Mitigation Measure 3.11-3****: Construction activities shall adhere to the requirements of the City of Clovis Municipal Code Section 5.27.604 with respect to hours of operation. This requirement shall be noted in the improvements plans prior to approval by the City's Engineering Division.* ***Mitigation Measure 3.11-4:*** *The contractor shall ensure that the following noise attenuating strategies are implemented during project construction:* • *During construction, the contractor shall ensure mufflers are properly installed on all construction equipment capable of being outfitted with mufflers.* • *The contractor shall locate equipment staging areas that will create the greatest distance between construction-related noise and/or vibration sources and sensitive receptors nearest the Project site during all Project construction.* • *Idling equipment shall be turned off when not in use.* • *Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.*	LS
Impact 3.11-3: Cumulative Noise- The proposed	LS	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Project has the potential to generate 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.			
Impact 3.11-4: The proposed Project has the potential to generate excessive groundborne vibration or groundborne noise levels.	LS	*None required.*	LS
Impact 3.11-5: 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.	LS	*None required.*	LS
PUBLIC SERVICES AND RECREATION			
Impact 3.12-1: The proposed Project has the potential to require the construction of police department facilities which may cause substantial adverse physical environmental impacts.	LS	*None required.*	LS
Impact 3.12-2: The proposed Project has the potential to require the construction of fire department facilities which may cause substantial adverse physical environmental impacts.	LS	*None required.*	LS
Impact 3.12-3: The proposed Project has the potential to require the construction of school facilities which may cause substantial adverse physical environmental impacts.	LS	*None required.*	LS
Impact 3.12-4: The proposed Project has the potential to have effects on other public facilities.	LS	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.12-5: The proposed Project has the potential to require the construction of park and recreational facilities which may cause substantial adverse physical environmental impacts.	LS	*None required.*	LS
Impact 3.12-6: The proposed Project has the potential to increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated.	LS	*None required.*	LS
TRANSPORTATION AND CIRCULATION			
Impact 3.13-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	LS	*None required.*	LS
Impact 3.13-2: The proposed project would conflict with or be inconsistent with CEQA Guideline section 15064.3, subdivision (b).	PS	***Mitigation Measure 3.13-1:*** *Implement a commute trip reduction program applicable to all or selected employers within the Project. The program would include the following components:* • *trip reduction targets* • *measures to discourage single occupancy vehicles while encouraging alternative modes of transportation such as carpooling, ridesharing, vanpooling, subsidized transit passes and other benefits,* • *include a guaranteed ride home for eligible employers,* • *establish applicable fees and funding mechanisms,* • *define monitoring measures and frequency, and strategies for non-compliance.* *The CAPCOA Handbook Measure T-5 estimates that a voluntary commute trip reduction program can reduce commute VMT by up to 4.0 percent with full participation of all eligible*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		employees. Commute VMT to and from employers within Vista Ranch is projected to account for a maximum of 7.5 percent of total VMT. Therefore, the maximum VMT reduction from a commute trip reduction program would be 4.0 percent times 7.5 percent or 0.3 percent VMT reduction. ***Mitigation Measure 3.13-2****: Provide bicycle facilities that include bike parking and bike lockers The CAPCOA Handbook Measure T-10 estimates that provision of end-of-trip bicycle facilities can reduce commute VMT by up to 4.4 percent depending on the existing propensity for commuters to use bicycles. The potential VMT reduction for employers in Clovis is estimated at 0.61 percent. Commute VMT to and from employers within Vista Ranch is projected to account for a maximum of 7.5 percent of total VMT. Therefore, the maximum VMT reduction from bicycle end-of-trip facilities would be 0.61 percent times 7.5 percent or 0.05 percent VMT reduction.* ***Mitigation Measure 3.13-3:*** *Based on the Vista Ranch Illustrative Plan in the September 15, 2023 Draft of the Vista Ranch Master Development Plan, there would be approximately 53 intersections within the Master Plan area that would provide direct network connectivity connecting clusters of housing with other clusters and the main street network. The total Master Plan area is approximately 507 acres (0.79 square mile), resulting in an average intersection density of about 67 street intersections per square mile providing street network connectivity for all modes of travel. The proposed intersection density would be 86 percent higher than the American average. Therefore, the proposed street grid would be expected to provide up to a 12 percent reduction in VMT compared to typical development areas.* *The proposed site plan shows that many of the local streets and residences would be separated from the collectors and arterials within the site by walls or fencing except at a relatively small number of vehicle access intersections. Adding additional bicycle and pedestrian access points through these walls or fences to facilitate more direct pedestrian and bicycle connections has the potential to reduce VMT by providing more direct paths of travel between the various neighborhoods for non-auto modes.* ***Mitigation Measure 3.13-4:*** *Increase the length of the area bicycle network, including separated trails available to bicycles as well as on-street bike lanes. The Project proposes to add 4.5 miles of Class I separated trails. This would increase the mileage of bicycle facilities in Clovis from the existing 21.2 miles to 25.7 miles, an increase of 21 percent. The CAPCOA Handbook Measure T-20 estimates that a 21 percent increase in bike network mileage could*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		reduce citywide VMT by 0.01 percent. The total daily VMT generated in Clovis is approximately 4,285,900, so the Project bike network would reduce daily VMT by approximately 350. This would represent a 0.2 percent reduction from the unmitigated Project total daily VMT of 188,900. Note that these VMT reductions would occur citywide and would not exclusively affect Project trips. ***Mitigation Measure 3.13-5:*** *Contribute to implementation of expanded transit service in Clovis, including potentially service to the Project area. Implementation of expanded transit service would require both capital expenditures for support facilities, including construction of transit stops and facilitating extensions of future transit routes. The CAPCOA Handbook Measure T-25 estimates that a 25 percent increase in transit service hours could reduce citywide VMT by 0.3 percent. The total daily VMT generated in Clovis is approximately 4,285,900, so the expanded transit network would reduce daily VMT by approximately 12,600. This would represent a 6.7 percent reduction from the unmitigated Project total daily VMT of 188,900. Note that these VMT reductions would occur citywide and would not exclusively affect Project trips.*	
Impact 3.13-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS	*None required.*	LS
Impact 3.13-4: The proposed project would result in adequate emergency access	LS	*None required.*	LS
UTILITIES (This project will comply with all existing regulations, rules, standards, and specifications that are already in place, including from FID, FMFCD, RWQCB, etc.)			
Impact 3.14-1: The proposed Project would not result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the project's projected demand in addition to the providers existing commitments.	LS	*None required.*	LS
Impact 3.14-2: The proposed Project would not	LS	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects.			
Impact 3.14-3: The proposed Project has the potential to require or result in the construction of new water treatment facilities or expansion of existing water facilities, the construction of which could cause significant environmental effects.	LS	*None required.*	LS
Impact 3.14-4: The proposed Project does not have the potential to have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.	LS	*None required.*	LS
Impact 3.14-5: The proposed Project has the potential to require or result in the construction of new stormwater drainage facilities, the construction of which could cause significant environmental effects.	LS	*None required.*	LS
Impact 3.14-6: The proposed Project has the potential to be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs and comply with federal, State, and local statutes and regulations related to solid waste.	LS	*None required.*	LS
Impact 3.14-7: The proposed Project has the potential to require or result in the construction of new electrical, or telecommunications facilities, the construction of which could cause significant environmental effects	LS	*None required.*	LS
CUMULATIVE IMPACTS			
Impact 4.1: Cumulative Degradation of the	LS and LCC	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Existing Visual Character of the Region			
Impact 4.2: Cumulative Damage to Scenic Resources within a State Scenic Highway	LS and LCC	*None required.*	LS
Impact 4.3: Cumulative Impact on Light and Glare	LS and LCC	*None required.*	LS
Impact 4.4: Cumulative Impact on Agricultural Resources	LS and LCC	*None required.*	LS
Impact 4.5: Cumulative Impact on the Region's Air Quality	PS	*Implement Project Design and Mitigation Measures presented earlier.*	CC and SU
Impact 4.6: Contributions to Impacts on Special-Status Species and their Habitat	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.7: Contributions to Adverse Effects on Wildlife Due to Increased Nighttime Lighting	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.8: Contributions to Cumulative Loss and Degradation of Sensitive Natural Communities and Jurisdictional Wetlands/Waters	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.9: Creation of New Cumulative Impacts on Biological and Jurisdictional Resources Through Repeated Activities	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.10: Cumulative Impacts on Known and Undiscovered Cultural and Tribal Resources	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.11: Cumulative Impact on Geologic and Soils Resources	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.12: Cumulative Impact on Climate Change from Increased Project-Related Greenhouse Gas Emissions	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.13: Cumulative Impact on the Inefficient, Wasteful, or Unnecessary Use of Energy Resources	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.14: Cumulative Impact Related to Hazards and Hazardous Materials	LS and LCC	*None required.*	LS
Impact 4.15: Cumulative Increases in Peak Stormwater Runoff from the Project site	LS and LCC	*None required.*	LS
Impact 4.16: Cumulative Impacts Related to	LS and LCC	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Degradation of Water Quality			
Impact 4.17: Cumulative Impacts Related to Degradation of Groundwater Supply or Recharge	LS and LCC	*None required.*	LS
Impact 4.18: Cumulative Impacts Related to Flooding	LS and LCC	*None required.*	LS
Impact 4.19: Cumulative Impact on Communities and Local Land Uses	LS and LCC	*None required.*	LS
Impact 4.20: Cumulative Impacts on Population and Housing	LS and LCC	*None required.*	LS
Impact 4.21: Cumulative Exposure of Existing and Future Noise-Sensitive Land Uses to Increased Noise Resulting from Cumulative Development	LS and LCC	*Implement Mitigation Measures presented earlier.*	LS
Impact 4.22: Cumulative Impact on Public Services and Recreation	LS and LCC	*None required.*	-LS
Impact 4.23: Under Cumulative conditions, Project implementation would not result in VMT increases that are greater than 87 percent of Baseline conditions	PS	*Implement Project Design and Mitigation Measures.*	CC and SU
Impact 4.24: Under Cumulative conditions, the proposed Project would not conflict with a program, plan, policy or ordinance addressing the circulation system, including transit, bicycle, and pedestrian facilities, or increase hazards due to a design feature, incompatible uses, or inadequate emergency access	LS and LCC	*None required.*	LS
Impact 4.25: Cumulative Impact on Wastewater Utilities	LS and LCC	*None required.*	LS
Impact 4.26: Cumulative Impact on Water Utilities	LS and LCC	*None required.*	LS
Impact 4.27: Cumulative Impact on Stormwater Facilities	LS and LCC	*None required.*	LS
Impact 4.28: Cumulative Impact on Solid Waste Facilities	LS and LCC	*None required.*	LS
Impact 4.29: Cumulative Impact from Electrical,	LS and LCC	*None required.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Natural Gas, or Telecommunications Facilities			

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

1.1 PURPOSE AND INTENDED USES OF THE EIR

The City of Clovis, as the lead agency, determined that the proposed Vista Ranch is a "project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report (EIR) prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

The City of Clovis, as the lead agency, has prepared this Draft EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from implementation of the proposed Project. The environmental review process enables interested parties to evaluate the proposed Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the proposed Project. This EIR will be used by the City of Clovis to determine whether to approve, modify, or deny the proposed Project and associated approvals in light of the Project's environmental effects. The EIR will be used as the primary environmental document to evaluate full development, all associated infrastructure improvements, and permitting actions associated with the proposed Project. All of the actions and components of the proposed Project are described in detail in Chapter 2.0, Project Description.

1.2 TYPE OF EIR

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Project-level EIR, which is described in State CEQA Guidelines § 15161 as: "The most common type of EIR (which) examines the environmental impacts of a specific development project. This 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."

1.3 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the proposed Project or an aspect of the proposed Project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386). The following agencies are considered "Responsible Agencies" or "Trustee

Agencies" for the proposed Project, and may be required to issue permits or approve certain aspects of the proposed Project:

- Fresno Local Agency Formation Commission (LAFCo) – SOI Amendment, Annexation, and Detachment from the Fresno County Fire Protection District and the County Service Area No. 51 (Dry Creek);
- Central Valley Regional Water Quality Control Board (CVRWQCB) - Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities pursuant to the Clean Water Act;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) - Approval of construction-related air quality permits; and
- Fresno Metropolitan Flood Control District – review of stormwater facilities, grading, and street improvements.
- Fresno County Department of Public Health – Permits for abandonment of wells and septic systems, underground storage tanks.
- California Department of Fish and Wildlife – Incidental Take Permit.

1.4 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City of Clovis circulated a Notice of Preparation (NOP) of an EIR for the proposed Project on October 18, 2023, to the State Clearinghouse, State Responsible Agencies, State Trustee Agencies, Other Public Agencies, Organizations, and Interested Persons. A public scoping meeting was held on November 8, 2023 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments received on the NOP by interested parties are presented in Appendix A.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the proposed Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this Draft EIR. Upon completion of the Draft EIR, the City of Clovis will file the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review

period. Additionally, the City of Clovis will file the Notice of Availability with the County Clerk and have it published in a newspaper of regional circulation to begin the local public review period.

PUBLIC NOTICE/PUBLIC REVIEW

The City of Clovis will provide a public notice of availability for the Draft EIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA, the review period for this Draft EIR is forty-five (45) days. Public comment on the Draft EIR will be accepted in written form. All comments or questions regarding the Draft EIR should be addressed to:

Attn: McKencie Perez, MPA | Senior Planner
City of Clovis | Planning Division
1033 Fifth Street
Clovis, CA 93612
559.324.2310
mckenciep@cityofclovis.com

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments received at a public hearing during such review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete," the City Council may certify the Final EIR in accordance with CEQA. The rule of adequacy generally holds that an EIR can be certified if:

1) The EIR shows a good faith effort at full disclosure of environmental information; and

2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed Project in contemplation of environmental considerations.

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines and recent court decisions, which provide the standard of adequacy on which this document is based. The Guidelines state as follows:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*

Following review and consideration of the Final EIR, the City may take action to approve, modify, or reject the Project. A Mitigation Monitoring and Reporting Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the Project to reduce or avoid significant effects on the environment. This Mitigation Monitoring and Reporting Program will be designed to ensure that these measures are carried out during Project implementation, in a manner that is consistent with the EIR.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft EIR was established through review of environmental and planning documentation developed for the proposed Project, environmental and planning documentation prepared for recent projects located within the City of Clovis, applicable local and regional planning documents, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

This Executive Summary summarizes the characteristics of the proposed Project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the proposed Project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed Project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, and identifies the scope and organization of the Draft EIR.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed Project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, related improvements, and a list of related agency action requirements.

CHAPTER 3.0 – ENVIRONMENTAL IMPACT ANALYSIS

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the proposed Project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact.

The following environmental topics are addressed in this section:

- Aesthetics and Visual Resources
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural and Tribal Resources
- Geology, Soils, and Minerals
- Greenhouse Gases, Climate Change, and Energy
- Hazards and Hazardous Materials/Wildfire
- Hydrology and Water Quality
- Land Use, Population, and Housing
- Noise
- Public Services and Recreation
- Transportation and Circulation
- Utilities

CHAPTER 4.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, cumulative, and significant and unavoidable environmental effects.

CHAPTER 5.0 – ALTERNATIVES TO THE PROJECT

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the proposed Project, which could feasibly attain the basic objectives of the proposed Project and avoid and/or lessen any significant environmental effects of the proposed Project. Chapter 5.0 provides a comparative analysis between the environmental impacts of the proposed Project and the selected alternatives.

CHAPTER 6 – REPORT PREPARERS

This section lists all authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the EIR, as well as technical material prepared to support the analysis.

1.6 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City of Clovis received ten (10) written comment letters on the NOP for the proposed Project. Copies of the letters are provided in Appendix A of this Draft EIR. The commenting agency/citizen is provided below. The City also held a public scoping meeting on November 8, 2023.

1. Native American Heritage Commission (October 24, 2023)
2. City of Clovis, Public Utilities Department (October 24, 2023)
3. County of Fresno, Department of Public Health (November 2, 2023)
4. County of Fresno, Department of Public Works and Planning (November 3, 2023)
5. Fresno Irrigation District (November 7, 2023)
6. San Joaquin Valley Air Pollution Control District (November 13, 2023)
7. California Department of Transportation (November 16, 2023)
8. Fresno Metropolitan Flood Control District (November 17, 2023)
9. California Department of Fish and Wildlife (December 4, 2023)
10. Center for Biological Diversity (December 15, 2023)

The City of Clovis received an additional letter from an Early Consultation (CON) State Clearinghouse No. 2023100508. A copy of this letter is also provided in Appendix A of this Draft EIR.

11. California Department of Fish and Wildlife (February 28, 2024)

1.7 POTENTIAL AREAS OF CONCERN

The following are topics of public concern or potential controversy that have become known to the City staff based on public input, known regional issues, and staff observations:

- Agricultural: conversion of farmland, impacts to adjacent farmland, cumulative loss of farmland, compatibility with Williamson Act contracts, impacts on agricultural operations, mitigation measures for agricultural impacts;
- Air Quality/Greenhouse Gas Emissions/Energy: project related air emissions, construction emissions, operations emissions, quantification of emissions, health risk screening/assessment, ambient air quality, emissions reduction, vegetation barriers/urban greening, clean lawn/garden equipment, District rules/regulations;
- Biological: California tiger salamander, Swainson's hawk and other raptors, wetlands;
- Hazards/Hazardous Materials: Use or storage of hazardous materials and wastes, underground petroleum storage tanks, protection of groundwater, proper destruction of wells and septic tanks, appropriate construction equipment operations and maintenance;

- Hydrology/Water Supply Concerns: well water recharge/groundwater, irrigation, water supply; non-potable water supply, flood control/drainage, impervious surfaces, storm drainage easements;
- Land Use and Planning: Affordable housing;
- Noise: Compliance with the Noise Element, elevated noise levels;
- Traffic: Need for a traffic study, additional traffic, need for street improvements, need for improvements on internal roads and access to Fowler/Behymer; vehicle miles traveled, intersections Herndon Avenue/Fowler, and SR168/Shepherd Avenue, multimodal transportation, bicycle and pedestrian facilities, public transportation, connectivity between residential and commercial/retail uses, feasible mitigation, EV charging;
- Utilities: Costs of utility expansion, cumulative impacts.

This Page Intentionally Left Blank.

2.1 PROJECT LOCATION

The Vista Ranch Project (Project) is located directly north of the City of Clovis (City) limit line, in unincorporated Fresno County (County). The Project site consists of approximately 952 acres located within the City's Planning Area and is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues. Figures 2.0-1 and 2.0-2 show the proposed Project's regional location and vicinity. The Project site is located within portions of Sections 21, 22, and 23 of Township 12 South, Range 21 East, Mount Diablo Base and Meridian (MDBM).

2.2 PROJECT SITE DEFINED

The Project site includes several distinct planning boundaries as defined below. The following terms are used throughout this document to describe planning area boundaries within the Project site:

Project Area: Includes the whole of the Project site (approximately 952 acres), all of which is currently located in the City's Planning Area and would be incorporated into the City's sphere of influence (SOI). The Project area includes (1) the approximately 507-acre Vista Ranch Master Plan and (2) the approximately 445-acre Non-Development Area, as described below.

Vista Ranch Master Plan (Master Plan): Includes approximately 507 acres located entirely within the Project Area. The Master Plan contemplates the construction of up to 3,286 residential units, approximately 16 acres of commercial/mixed-uses, approximately 19 acres for an elementary school site, approximately 32 acres for mini-storage, and approximately 59 acres of parks, trails and preserved open space. The Master Plan is divided into two distinct planning areas, as further defined below: (1) MPArea 1, an approximately 368-acre area proposed for immediate development, and (2) MPArea 2, the remaining approximately 139 acres that is anticipated for future development.

- **MPArea 1 (Development Area):** MPArea 1 includes approximately 368 acres proposed to be developed by Wilson Premier Homes, Inc. A majority of the Development Area has been planned for urban uses and is included in the area designated as the Northeast Urban Center in the City's 1993 General Plan and subsequent General Plan updates. Consistent with that vision, the approximately 368-acre Development Area would consist of a mix of urban uses, including 2,500 to 2,718 residential units, non-residential uses for future gateway neighborhood commercial uses and community recreational facilities up to 133,000 square feet in size, and approximately 38 acres of parks, trails and open space. The Development Area would have a full project-level analysis in the environmental impact report (EIR), considering all entitlements necessary for development in the near term.
- **MPArea 2:** MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan. MPArea 2 also plans for a mix of urban uses as part of the Northeast Urban Center under the City's 1993 General Plan and subsequent General Plan updates. MPArea 2 is anticipated to have a programmatic-level analysis in the EIR. Future development of MPArea 2 is at the discretion of the property owners and subject to project-level analysis.

Non-Development Area: The Non-Development Area includes approximately 445 acres that have not requested, nor would receive, any entitlements other than to be included in the SOI expansion. The Non-Development Area is anticipated to have a programmatic-level analysis in the EIR.

2.3 PROJECT SETTING

EXISTING SITE CONDITIONS

The Project site is approximately 952 acres and includes 139 Assessor Parcels. Figure 2.0-3 depicts the parcels within the Project site and the proposed new SOI boundary, with specific Assessor Parcel Numbers (APNs) identified for the Master Plan area. In addition, APNs 557-031-30, -32S, -34, -36, -38, -40, -43S, and -45 are located along the north side of Shepherd Avenue and are owned by the City of Clovis for future roadway rights-of-way.

SITE TOPOGRAPHY

Topographically, the Project site is characterized as flat to gently sloping southerly and westerly, with elevations varying from approximately 385 to 400 feet above mean sea level (amsl). There is a knoll at the northeast corner of the Project area that varies in elevation from 395 to 440 feet amsl.

EXISTING SITE USES

Presently, the Project site consists of a combination of fallow and grazing land, several rural residences, offices and Contractor's Corp Yard, and a small tree nursery.

The proposed Master Plan portion of the Project site is bisected by the Big Dry Creek Reservoir Outlet Works Channel. When the dam was constructed, the natural Dry Creek drainage was re-routed into the reservoir basin; flow now exits via the channel and is conveyed via the channel to rejoin the Creek about 2,500 feet below the outlet works. The truncated and abandoned channel of Dry Creek remains a conspicuous feature in the east-central portion of the site, but no longer conveys flow, all of which has been re-routed via the Reservoir, Dam, outlet works, and channel.

East Shepherd Avenue, along the southern boundary, is identified as an Expressway in the Clovis General Plan Circulation Plan and is partially improved to an urban level adjacent to the Project site. East Perrin and East Behymer Avenues are County roads and located adjacent to several of the parcels within the Project Area. East Perrin and East Behymer Avenues both provide access to North Fowler Avenue, which is also a County Road. East Behymer Avenue also extends to North Sunnyside Avenue.

The Non-Development Area contains existing rural residential uses and agricultural fields. The Non-Development Area is located within the City of Clovis' Planning Area but is outside of the City's existing SOI. Figure 2.0-4 shows aerial imagery of the existing uses within the Project site.

EXISTING SURROUNDING USES

The Project site is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land and open space land uses. Uses immediately east of the Project site consist of the Big Dry Creek Reservoir Outlet Works Channel, and an existing earthen dam, owned and operated by the Fresno

Metropolitan Flood Control District. Uses immediately south of the Project site are primarily single-family residential. Uses immediately west and north of the Project site are primarily rural residential on larger lots and fallow or grazing properties.

EXISTING GENERAL PLAN LAND USE DESIGNATIONS AND ZONING

The following section outlines the existing City and County General Plan land use designations and zoning for the Project site. It should be noted that the Project site is currently outside of the jurisdiction of the City of Clovis and, therefore, does not have City of Clovis zoning designations.

City of Clovis

The City of Clovis General Plan was adopted on August 25, 2014. Figure 2.0-5 depicts the existing General Plan land use designations for the Project site and the surrounding areas under the adopted City of Clovis General Plan. Figure 2.0-6 depicts the existing City of Clovis and Fresno County zoning designations. All parcels within the Project site currently have Fresno County zoning designations.

Most of the Project site is located within Clovis General Plan Focus Area 13. The Urban Center requires a master plan community overlay district or specific plan to implement development in Focus Area 13. The proposed Project includes a general plan amendment to establish Focus Area 13a for the Master Plan.

The City of Clovis General Plan includes a conceptual land use plan for this area illustrating the City of Clovis' desire for a master planned mixed-use community. Figure 2.0-7 depicts the proposed General Plan land use designations, and Figure 2.0-9 depicts the proposed zone district designations with the MPC overlay. The land use designation for the entire Master Plan would be Mixed Use Village, and multiple zone districts would be applied to define specific uses within Focus Area 13a.

A focus area complements a property's General Plan land use designation and may expand permissible uses, introduce new policy requirements, augment development standards, or simply call attention to a complex property. The proposed Project would establish specific requirements and additional uses that would be permitted within Focus Area 13a. Refer to the Entitlement section for further details on Focus Area 13a.

Fresno County

The Project site is currently located in Fresno County. Figure 2.0-6 identifies the Fresno County General Plan land use designations and zoning for the Project site and surrounding area. The Project site area includes AE-20 (Exclusive Agriculture), AL-20 (Limited Agriculture) and R-R (Rural Residential) Zone Districts. The proposed Master Plan area is designated as AE-20 (Exclusive Agriculture) and AL-20 (Limited Agriculture) Zone Districts in the County General Plan. The proposed Master Plan includes an area previously approved by the County of Fresno for a mini storage land use and memorialized under Fresno County Conditional Use Permit 3526 in the AL-20 Zone District.

2.4 PROJECT OBJECTIVES

A clear statement of objectives and the underlying purpose of the proposed Project are discussed per CEQA Guidelines Section 15124(b).

PROJECT OBJECTIVES

Project objectives include a collection of goals and objectives, which clearly define the purpose of the Project. In developing the project objectives, it is notable that the City considered the Legislature's repeated determinations in recent years that California is facing a statewide housing crisis, and it is clearly within a city's exercise of its legislative discretion to facilitate the construction of new housing, which is a component of the Project Description. Government Code section 65889.5, subdivision (a)(1)(A), states that "[t]he lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." Subdivision (a)(1)(D) of that section adds that "[m]any local governments do not give adequate attention to the economic, environmental, and social costs of decisions that result in disapproval of housing development projects, reduction in density of housing projects, and excessive standards for housing development projects."

The principal objective of the proposed Project is the expansion of the City's SOI to include the Project site, annexation, master planning, and subsequent development of land to accommodate growth. The City has established several additional project goals and objectives that more fully inform the Project purpose. These Project goals and objectives are as follows:

- Expand the City's SOI in an area contemplated by the City General Plan to establish a logical and orderly boundary that promotes the efficient extension of municipal services to areas planned for growth.
- Undertake Master Planning as a long-range planning tool to guide development within areas designated for growth under the City of Clovis General Plan.
- Provide residential housing opportunities that are visually attractive and accommodate the future housing demand in Clovis.
- Refine the mixture of housing types, sizes and densities that collectively provide for local and regional housing demand.
- Provide infrastructure that meets City standards and is integrated with existing and planned facilities and connections.
- Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet City standards.
- Develop a strong pedestrian network that links activities, recreational amenities, local commercial uses and neighborhoods together.
- Establish neighborhood designs that consider safety and security of citizens.
- Consider affordability and housing diversity by developing residential uses that are proximate to urban services and roadways and varied in size and density.
- Embrace the natural resources and views of the Sierra Nevada Mountain range.

2.5 PROJECT ENTITLEMENTS

GENERAL PLAN AMENDMENT

The proposed Project would require general plan amendments that cover City of Clovis General Plan Focus Area 13. This would include land use modifications, focus area modification, Shepherd Avenue access modification, Circulation Element modifications, and Parks and Open Space Element modification to accommodate the proposed Master Plan. Each are discussed below:

Land Use Modifications

The proposed Project requires adjustments to the land uses within the Master Plan area. The proposed General Plan land use designation for the Master Plan area is Mixed Use Village, as shown in Figure 2.0-7. The Mixed Use Village land use designation would allow for the development of a master planned community through multiple zoning designations, including the Master Plan Community Overlay District.

Focus Area 13 Modification

The proposed modification to the original boundaries of the City of Clovis General Plan Focus Area 13 would memorialize the approximately 507-acre Master Plan as a subarea of Focus Area 13. This application is not intended to eliminate the greater Focus Area 13 established under the General Plan; rather, it would create a new Focus Area designation (Focus Area 13a) to establish and refine specific development goals and policies for this portion of Focus Area 13. Refer to Figure 2.0-8.

The adopted attributes of Focus Area 13a would include the following:

Primary Land Use: A mixed-use village within an Urban Center

Additional Uses Allowed: As indicated in the Vista Ranch Master Development Plan

Design Features:

- Master plan required.
- Development should give special consideration to buffering of residential uses adjacent to the Focus Area.
- Development should integrate with and support active and public transportation.
- Development should reflect, in its design, the legacy and landmarks of the local Sierra foothill area.
- The master planned community should provide for a variety of “lifecycle” housing types.
- Development should encourage “walkability” and safe pedestrian and bicycle routes to all land uses.
- Trails, parks, and open spaces should logically connect with the greater Clovis area and provide additional recreational opportunities for the City of Clovis.
- Development shall incorporate neighborhood serving commercial and service uses, as well as educational opportunities.
- The residential unit count shall be between 2,600 and 3,286 units.
- The density shall establish a mixture of housing types, sizes and densities that collectively provide for local and regional housing demand. Densities may vary between 2.1 to 43 du/acre.

Shepherd Avenue Access Modification

The proposed Shepherd Avenue access modification includes a relocated vehicular access point along the limited access designation of Shepherd Avenue adjacent to the proposed Focus Area 13a. Current City of Clovis policy is to allow permanent street access points at the one-half-mile points along this portion of Shepherd Avenue. While an intersection access does occur at Armstrong Avenue, the Shenandoah Farms residential development (approved in the County of Fresno) precludes any extension of Armstrong Avenue to the north**.**

The proposed Shepherd Avenue access modification would move what would have been an allowable access point approximately 500 feet to the east, creating a non-signalized "right-in, right-out, left-in" ingress and egress on the north side of Shepherd Avenue. This configuration would interface appropriately with the currently existing Armstrong/Shepherd Avenue intersection.

Two recent and similar modifications have recently been approved along Shepherd Avenue addressing unique site and circulation needs. In this case, this access point would assist in providing the two required points of access for initial phases of development, as well as accommodating "built-out" traffic circulation in the manner envisioned in the Clovis General Plan.

Circulation Element Modifications

The proposed Circulation Element modifications may include an amendment to the City of Clovis General Plan Figure C-1, Circulation Diagram, by proposing to add major street route designations within Focus Area 13a. These designations will be decided by City of Clovis staff. Focus Area 13a, as requested to be modified, abuts Shepherd Avenue, a designated Expressway, along its southern boundary, which includes three significant intersections: Armstrong Avenue, designated as a local street; Temperance Avenue designated as an Arterial; and Locan Avenue, designated as a Collector. While Armstrong Avenue's extension to the north is impeded by the Shenandoah Farms residential development (approved in the County of Fresno), the Temperance Avenue and Locan Avenue intersections provide access points to the proposed Master Plan area.

Given the traffic lane geometrics of these pre-existing intersections, as well as the traffic load generated by the proposed Master Plan, major street designations are being proposed and are requested to be added to the Circulation Element of Clovis' General Plan.

In addition, modifications to the City of Clovis General Plan Figure C-2, Bicycle and Trails System, are proposed, adding and connecting multipurpose trails and bike lanes within the Development Area to integrate with the current Clovis trail and bike system.

Parks and Open Space Element Modification

The proposed Parks and Open Space Element modification includes the General Plan's Figure OS-1, Parks and Open Space diagram, by adding Class I trail routes, open spaces, and parks within modified Focus Area 13a. Over four miles of Class I trails, as well as pedestrian enhanced street sections, are being proposed with the general plan amendment application that would integrate with the current Clovis trail system. Neighborhood Park areas assigned under the 2014 General Plan Update are being redistributed to integrate with the design of the proposed Master Plan. This modification request is further refined within the proposed Master Plan document being considered under the concurrent Master Plan Community (M-P-C) Zone District application described below.

MASTER PLAN COMMUNITY OVERLAY DISTRICT

The Master Plan Community (M-P-C) Overlay District implements Focus Area 13a by addressing larger scale mixed-use development through a variety of flexible development standards to achieve a higher degree of community design. The M-P-C Overlay District is implemented through the Vista Ranch Master

Development Plan (Plan), which is a written and illustrative plan that serves as a guideline for the long-term physical development of the area. The Plan guides land use, circulation, infrastructure, and buildings to connect social, economic, and environmental goals of the community. The Plan identifies the location and size of development parcels, establishes desired zoning designations, establishes development standards, illustrates transportation/circulation patterns (including alternative modes of transportation, such as transit, NEV, bicycle, and pedestrian), and establishes areas for open space and community facilities. Figure 2.0-9 illustrates the zoning designations proposed within the Plan.

PRE-ZONING

The Project site is currently located outside of the Clovis City limits and, therefore, does not have City-designated zoning. The proposed Project includes a request for pre-zoning within the Master Plan to appropriate City of Clovis zone districts (Figure 2.0-9). The portion of the Project site that is outside of the Master Plan area would not receive pre-zoning designations.

Master Plan: The Project contemplates a pre-zoning request for the Master Plan area to the following City of Clovis zone districts: R-1, R-1-MD, R-2, R-4, C-1, C-R, M-1 and O. Since all of these zone districts are within the M-P-C Overlay District, they would include the M-P-C suffix and subject to the development standards as modified and adopted in the Master Plan.

- **Single Family Residential Low-Density Zoning (R-1):** This designation identifies areas appropriate for conventional single-family uses. The allowable density range within the Master Plan is 2.1 to 5.0 du/acre.

- **Single Family Residential Medium-Density Zoning (R-1-MD):** This designation identifies areas appropriate for single-family uses, including attached and detached single-family structures. The allowable density range within the Master Plan is 4.1 to 12.0 du/acre.

- **Single Family Residential Medium High-Density Zoning (R-2):** This designation identifies areas appropriate for moderately dense residential uses, including multifamily apartments, duplexes, townhouses, and small parcel, attached and detached single-family uses. The allowable density range is 7.1 to 15.0 du/acre.

- **Multi-Family Residential Very High-Density Zoning (R-4):** This designation identifies areas appropriate for high and very high density residential uses, particularly in association with mixed-use development. The allowable density range is 25.1 to 43.0 du/acre.

- **Neighborhood Commercial Zoning (C-1):** This designation identifies areas appropriate for providing convenience services, compatible with adjacent neighborhood areas.

- **Community Recreation Zoning (C-R):** This designation identifies areas appropriate for commercial recreation into a planned integrated center for the community.

- **Light Industrial (M-1):** This designation identifies areas appropriate for business parks and industrial uses, including mini- storage.

- **Open Space and Parks Zoning (O):** This designation identifies areas appropriate for open space, such as parks, flood control channels, greenbelts, parkways, ponding basins, trails and wildlife preserves.

VESTING TENTATIVE SUBDIVISION MAP

The proposed Project includes a vesting tentative map (VTM) for a portion of the Master Plan (MPArea 1 only). The VTM would cover approximately 368 acres within 13 assessor parcels (APN's), more specifically, APNs 557-012-02, -28, and -29, 557-022-11S, 557-031-05S, -23, -24, -25, -27, -35, -37 and -44S and 558-010-25.

The VTM would result in the subdivision of approximately 368 acres for the development of up to 2,718 residential units. This includes single-family lots, outlots for multi-family development (approximately 15 acres), and outlots of approximately seven acres for mixed uses (neighborhood commercial and community recreation facilities). Additional outlots would include private community recreation, parks, roads, utilities, greenspace, landscaping and pedestrian paths and trails.

The VTM proposes new public roadways with pedestrian/bicycle and vehicular access, landscaping and lighting, and other infrastructure, such as water, storm drainage, wastewater facilities. All onsite infrastructure is located within the boundaries of the Project site, and offsite infrastructure may include connections and improvements to existing infrastructure in adjacent roadways, including Behymer Avenue between Sunnyside Avenue and the Project Area, Fowler Avenue between Shepherd and Behymer Avenues, Perrin Avenue between Fowler and the Project Area, Shepherd Avenue between Fowler and DeWolf and Locan Avenues within the Project Area. All infrastructure design would be confirmed through engineering studies and calculations.

DEVELOPMENT AGREEMENT

The proposed Project may also include a Development Agreement between the City and the Project Applicant. The Development Agreement would specify obligations of both the City and the Applicant with respect to the future development of the MPArea 1 (Development Area).

ANNEXATION

The proposed Project includes an annexation of approximately 507 acres, which covers the entire boundary of the proposed Master Plan. The annexation does not include the approximately 445-acre Non-Development Area. The final annexation boundary may be refined as part of the study process, which would ultimately include a public hearing before the Fresno County Local Agency Formation Commission (LAFCO), who has the final statutory authority to set annexation boundaries.

SPHERE OF INFLUENCE EXPANSION

The proposed Project includes the amendment of the City's SOI to include the entire approximately 952-acre Project site. The area is currently located in the City's Planning Area, but outside of the City's SOI. The amendment of the City's SOI would require an application and approval by LAFCO.

2.6 MASTER PLAN DEVELOPMENT PROJECT CHARACTERISTICS

The proposed Project as implemented under the City of Clovis M-P-C Overlay District is a mixed-use development anticipated to provide not less than 2,600 residential units and up to 3,286 residential units, including single- and multi-family units. In addition, the M-P-C Overlay District, as implemented through the Master Development Plan, would include non-residential uses including a mixed-use neighborhood commercial center designed to provide localized retail and service uses and employment to the Project area and local surrounding areas, a mini storage site approved for development by the County of Fresno, an elementary school, and community recreation centers serving the community. Figure 2.0-9 depicts the proposed zoning of the properties within the Master Plan area. Figure 2.0-10 presents the planning areas.

RESIDENTIAL DEVELOPMENT

The proposed Master Plan would provide a variety of housing types and lot sizes that would accommodate a range of housing objectives and buyer needs, with a goal to ensure housing for a variety of families and lifestyles. The Master Plan would accommodate between 2,600 and 3,286 residential units, with densities varying from low density to very high density residential. The Master Plan has been designed to have low and medium densities, adjacent to rural residential development, and higher densities, adjacent to the major circulation corridors, localized amenities and commercial centers.

GREENSPACE

The Master Plan includes an extensive trail circulation system, which is intended to provide neighborhood connectivity and convenient and safe access to the various community amenities and commercial areas. In addition, multiple parks are dispersed throughout the Master Plan. These trail and park areas would combine or provide nearby public recreational elements and private recreational facilities for the Master Planned community. This includes public parks, trails, a private park for the community and preserved open space designed to be approximately 59 acres in area. The medium-high density gated neighborhoods would provide small parks or small community pools to those neighborhoods.

CIRCULATION

The Master Plan proposes a hierarchy of roadways to accommodate the capacity needs of the existing street network, as well as providing additional vehicular access to the Master Plan. Shepherd Avenue and Temperance Avenue are the main expressway/arterial/collector roadways providing access to the Development Area. In addition, Foothill Boulevard, Cypress Avenue, Perrin Road and Behymer Avenue will provide additional circulation for the Vista Ranch project. The neighborhoods within the Master Plan would include a network of public and private residential streets to provide an efficient flow of traffic and pedestrian mobility through the Development Area. Additionally, sidewalks would be included per the City of Clovis standards.

UTILITIES AND PLANNED INFRASTRUCTURE IMPROVEMENTS

The construction of on-site infrastructure improvements would be required to accommodate development within the Master Plan area, as described below.

Water System

The Master Plan would be served by a new connection to the City of Clovis potable and non-potable water distribution system. The proposed water system would be located within proposed public utilities easements and connected to existing City main lines. All water system infrastructure would comply with City Master Plans and standards.

The City of Clovis provides utility services to the City, including water. The City has three main water supply sources: groundwater, surface water, and recycled water. The City extracts groundwater from the Kings Subbasin. Surface water is delivered to the City by the Fresno Irrigation District (FID). The various current and planned for surface water supplies are from the Kings River and Central Valley Project. The City's Water Reuse Facility produces tertiary-treated effluent that can be used for agriculture or landscape irrigation.

The Master Plan would be served by a new potable water distribution system. Future phases of the Project would require new water supply infrastructure that would extend beyond the proposed Project boundaries. The precise nature and size of these improvements has not yet been determined; however, it is anticipated that these extended water infrastructure improvements be within existing rights-of-way or public utility easements along adjacent roadways and connected to existing City main lines. These future improvements would likely extend from the northern Project boundary to the west along Behymer Avenue until approximately 770 feet west of Sunnyside Avenue, as well as along Perrin Road, extending west until approximately Burgan Avenue.

Wastewater System

The Master Plan would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines. Wastewater treatment would be provided at the existing Fresno-Clovis Regional Wastewater Treatment Plant, in the City of Fresno, and by the City's Water Reuse Facility. By agreement with the City of Fresno, the City of Clovis owns a maximum capacity of 9.3 million gallons per day (mgd). The Fresno-Clovis Regional Wastewater Treatment Plant is operated by the City of Fresno, while subject to the equitable ownership interests of the City of Clovis and has a maximum capacity of 80 mgd. If required, the City has the capability to acquire additional capacity at the Wastewater Treatment Plant. Wastewater treatment may also be provided by the City of Clovis Water Reuse Facility. The Clovis Sewer Treatment - Water Reuse Facility (ST-WRF) serves the new growth areas of the City in the southeast, northwest, and ultimately the northeast urban centers. The ST-WRF is designed to accommodate future expansion and would ultimately treat 8.4 mgd. The City of Clovis would manage service to the Project site to optimize the use of available capacity at each of the plants to facilitate service to the Project.

Storm Drainage

The Master Plan would include construction of a new storm drainage system, which would conform to applicable regulations, standards, and specifications of the State Water Resources Control Board requirements (SWRCB), the Fresno Metropolitan Flood Control District (FMFCD), and City of Clovis. This includes, but is not limited to, the municipal National Pollutant Discharge Elimination System (NPDES) storm water discharge permit, as well as Best Management Practices (BMPs) to control the volume, rate,

and potential pollutant load of storm water runoff. Stormwater throughout the City is collected in FMFCD's basins.

Regulated Public Utilities

Electrical service is provided by Pacific Gas and Electric (PG&E). Natural gas is not anticipated for MPArea 1, although it may be included in MPArea 2 pending a proposal by the property owners. Phone service is provided by AT&T. Cable service is provided by Comcast, and related internet services would be extended to all portions of the Master Plan area from existing facilities located along East Shepherd Avenue and from existing residential development surrounding the Master Plan area. Proposed utilities would be located within public utility easements to be dedicated along street frontages. Utility improvements would be installed in conjunction with planned street improvements.

2.7 ALTERNATIVES

CONSIDERATION OF ALTERNATIVE LOCATION

It is the City's desire to develop a reasonable range of alternatives to the proposed Project. The City has considered alternative locations early in the scoping process. The City's key considerations in identifying an alternative location was as follows:

- Is there an alternative location where significant effects of the Project would be avoided or substantially lessened?
- Is there a site available within the City's Sphere of Influence with the appropriate size and characteristics such that it would meet the basic Project objectives?

The City's consideration of alternative locations for the Project included a review of previous land use planning and environmental documents in Clovis, including the General Plan. The search included a review of land in Clovis that is located within the SOI, suitable for development, available for acquisition, and not already approved or pending development. It was found that there are projects that are already developed, approved but not yet developed, or currently under review in Clovis. These developed, approved, and pending projects are not available for acquisition by the Project applicant and are not considered feasible alternatives for the Project applicant. The City has found that there are no feasible alternative locations that exist within the City's SOI with the appropriate size and characteristics that would meet the basic Project objectives and avoid or substantially lessen a significant effect. The City has determined that alternative locations that are not a General Plan Focus Area and locations outside the SOI would not be feasible, because an expansion of the SOI into areas that are not already a Focus Area in the City of Clovis General Plan would induce unplanned growth and cause impacts greater than development on the Project site. For these reasons, the City determined that there are no feasible alternative locations.

ALTERNATIVES CONSIDERED

Four alternatives to the proposed Project have been developed early in the scoping process. It is noted that these alternatives may be modified based on analysis and input from agencies and the general public. Additionally, new and different alternatives may be developed through the process. The following four alternatives are described in further detail below:

- No Project (No Build) Alternative
- Reduced Density Alternative
- Increased Density Alternative
- Reduced Sphere of Influence Alternative

NO PROJECT (NO BUILD) ALTERNATIVE

Under the No Project (No Build) Alternative expansion of the SOI and development in the Master Plan would not occur. The Project site would remain in its current existing condition. It is noted that the No Project (No Build) Alternative would fail to meet the Project objectives/goals.

REDUCED DENSITY ALTERNATIVE

Under the Reduced Density Alternative, there would be downzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to very low residential density. The developable acreage would be 427 acres and density would be assumed to be two du/acre. The total unit count would decrease from 3,286 under the proposed Master Plan to a total of 854 under the Reduced Density Alternative. The SOI expansion of the entire Project site would still occur, but there would be no planned development of uses or infrastructure in the SOI expansion area.

INCREASED DENSITY ALTERNATIVE

Under the Increased Density Alternative, there would be upzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to higher densities to accommodate a 10 percent increase in residential units. The total unit count would increase from 3,286 under the proposed Master Plan to a total of 3,615 under the Increased Density Alternative. The SOI expansion of the entire Project would still occur, but there would be no planned development of uses or infrastructure in the SOI expansion area.

REDUCED SPHERE OF INFLUENCE ALTERNATIVE

Under this alternative, the proposed Project would only expand the SOI and annex the proposed Master Plan area, and it would exclude the 445-acre SOI expansion outside of the proposed Master Plan.

2.8 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

This EIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the proposed Project entitlements.

CITY OF CLOVIS

The City of Clovis is the Lead Agency for the proposed Project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050. Actions that would be required from the City include, but are not limited to the following:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- Approval of City of Clovis General Plan Amendments (Land Use Element, Circulation Element and Open Space and Conservation Element);

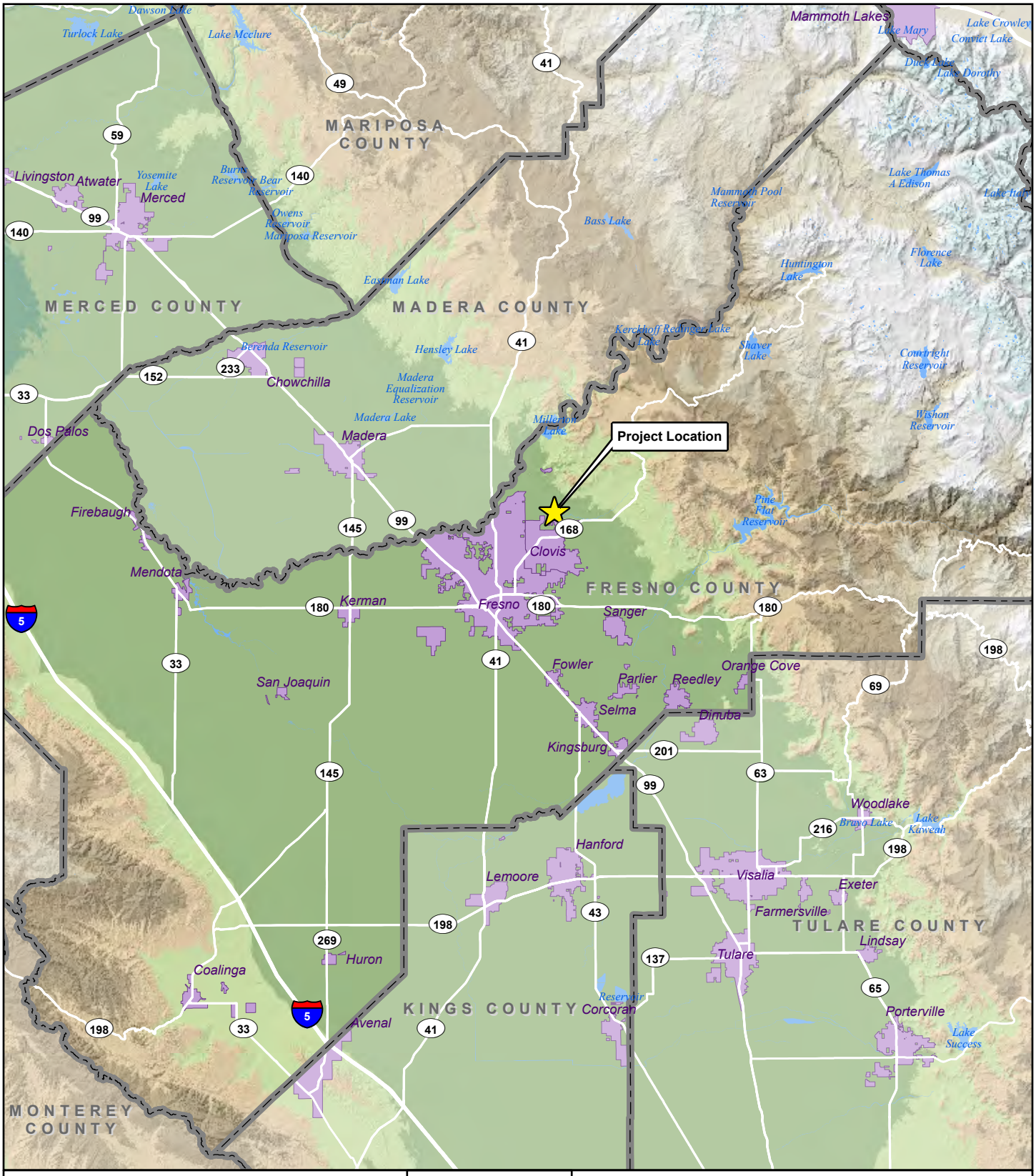
- Approval of City of Clovis Pre-zoning;
- Approval of Master Plan Community Overlay District and Master Development Plan;
- Approval of Vesting Tentative Maps;
- Possible approval of Development Agreement;
- Approval of SOI Expansion;
- Authorization to submit SOI Amendment request to Fresno LAFCo;
- Approval of Annexation of the Master Plan, including Inhabited Areas;
- Authorization to submit Annexation request for the Master Plan to Fresno LAFCo;
- Approval of future Final Maps;
- Approval of future Grading Plans;
- City review, approval, of construction and utility plans;
- Approval of future Building Permits; and
- Allocation and provision of City of Clovis Sewer and Water service.

OTHER GOVERNMENTAL AGENCY APPROVALS

The following agencies may be required to issue permits or approve certain aspects of the proposed Project. Other governmental agencies that may require approval include, but are not limited to, the following:

- Fresno Local Agency Formation Commission (LAFCo) – SOI Amendment, Annexation, and Detachment from the Fresno County Fire Protection District and the County Service Area No. 51 (Dry Creek);
- Central Valley Regional Water Quality Control Board (CVRWQCB) - Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities pursuant to the Clean Water Act;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) - Approval of construction-related air quality permits; and
- Fresno Metropolitan Flood Control District – review of stormwater facilities, grading, and street improvements.
- Fresno County Department of Public Health – Permits for abandonment of wells and septic systems, underground storage tanks.
- California Department of Fish and Wildlife – Incidental Take Permit.

This Page Intentionally Left Blank.



LEGEND

- Incorporated Area
- California Counties

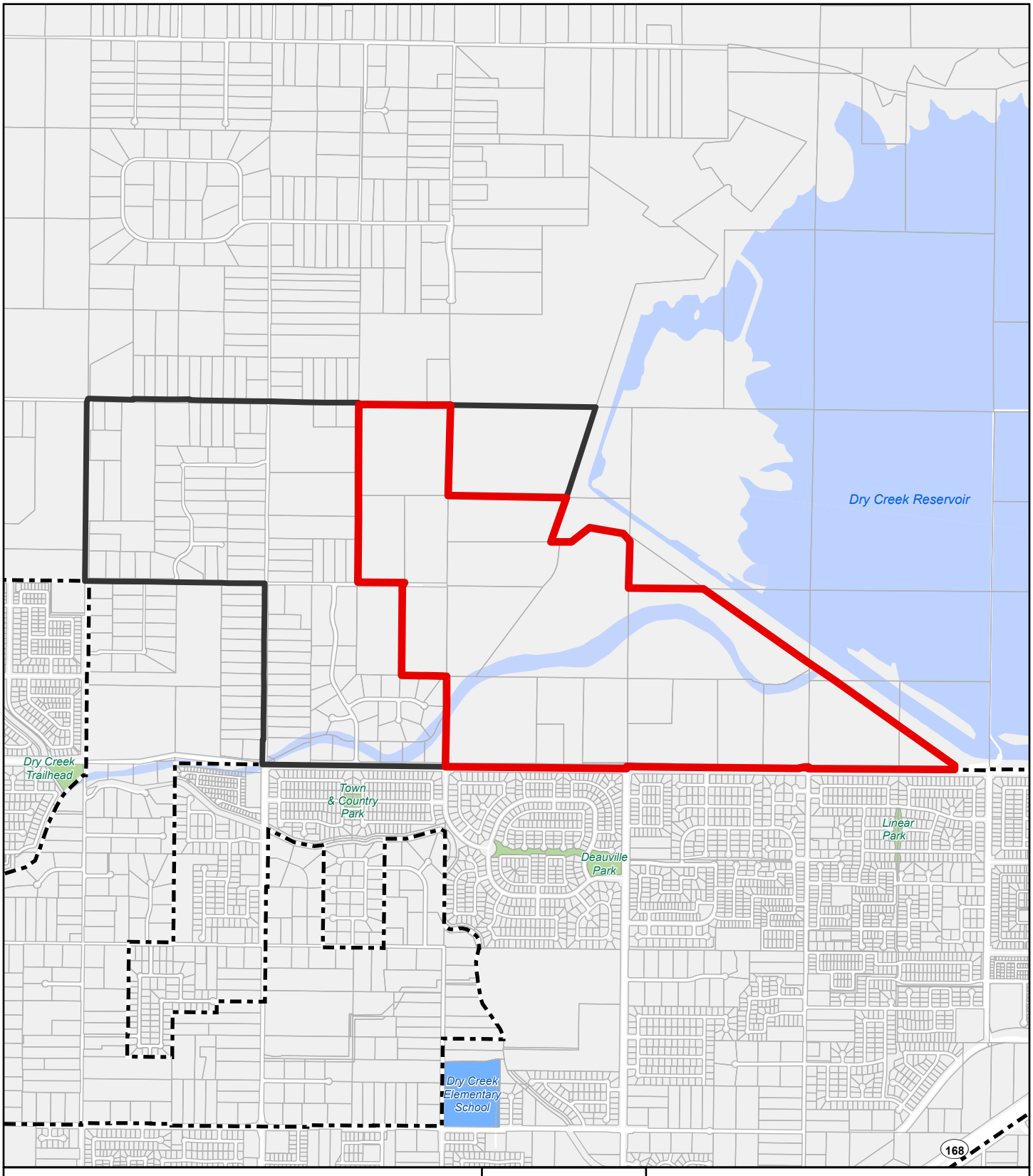
Sources: Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 2.0-1. Regional Location Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits

City of Clovis General Plan Land Use

- Park
- School

N

0 500 1,000

US Feet

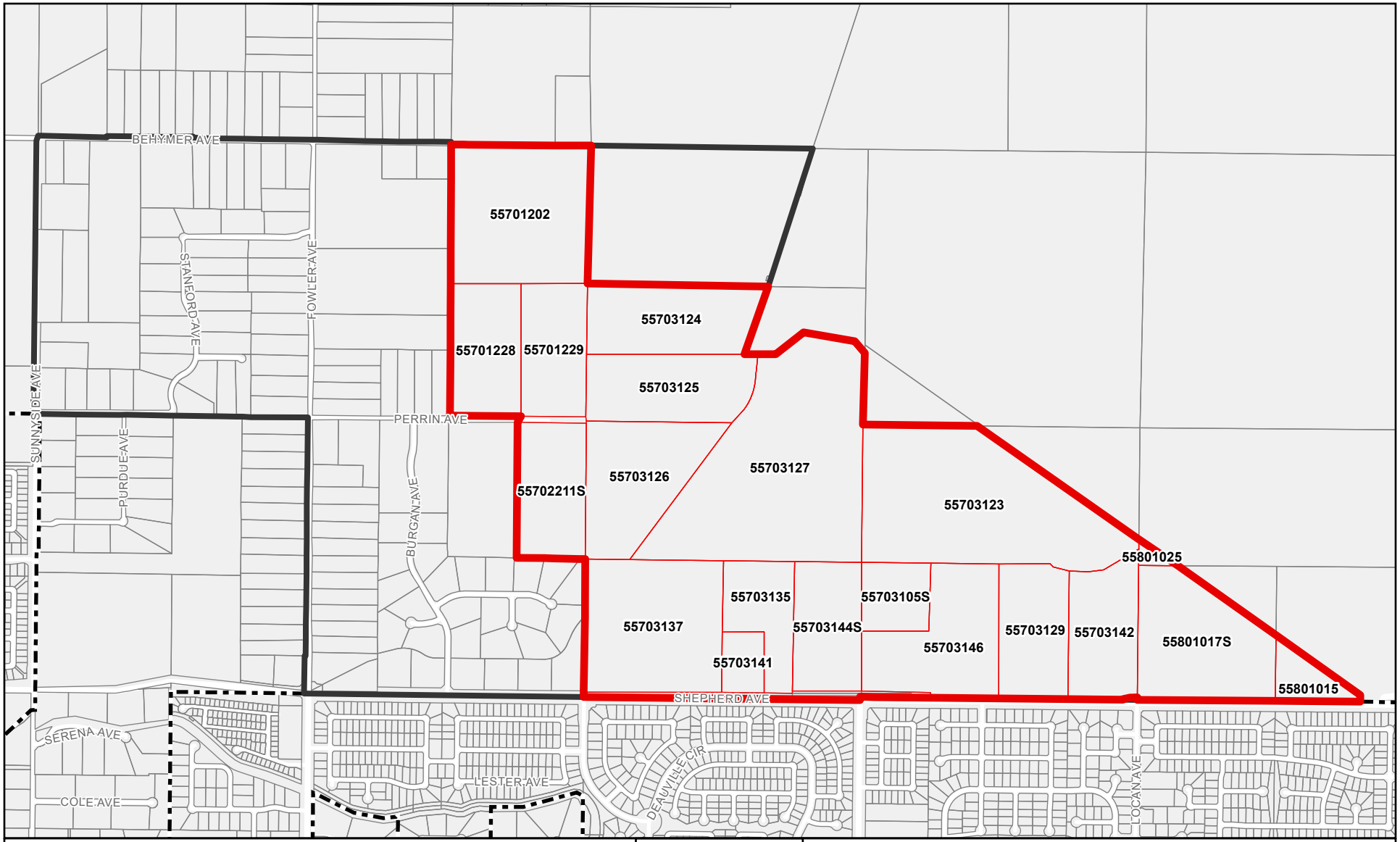
Sources: Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 2.0-2. Project Vicinity Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Master Plan Area
- Parcels within Master Plan Area
- SOI Expansion Area
- Clovis City Limits

N

0 400 800

US Feet

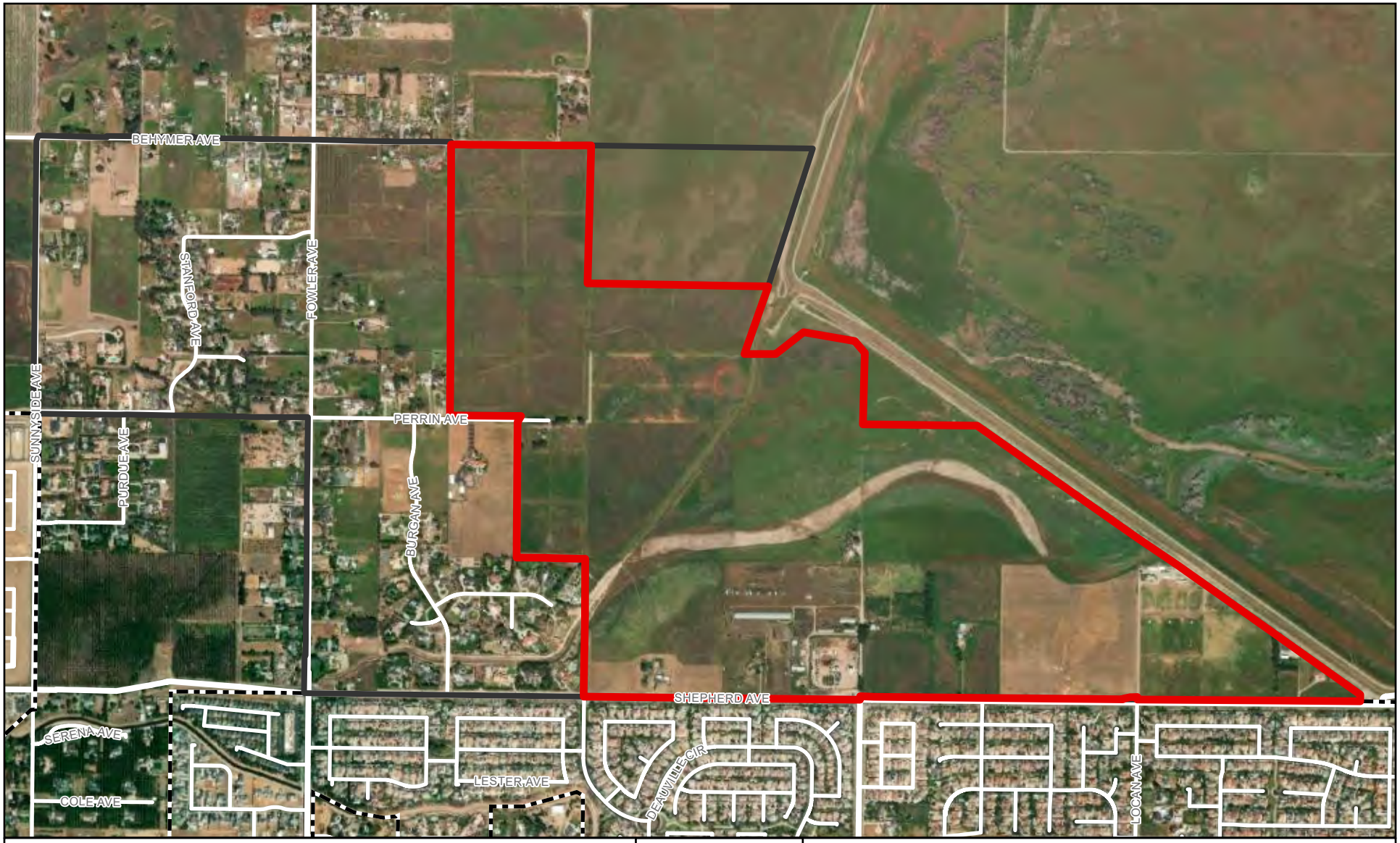
Sources: Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 2.0-3. Assessor Parcel Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits

N

0 400 800

US Feet

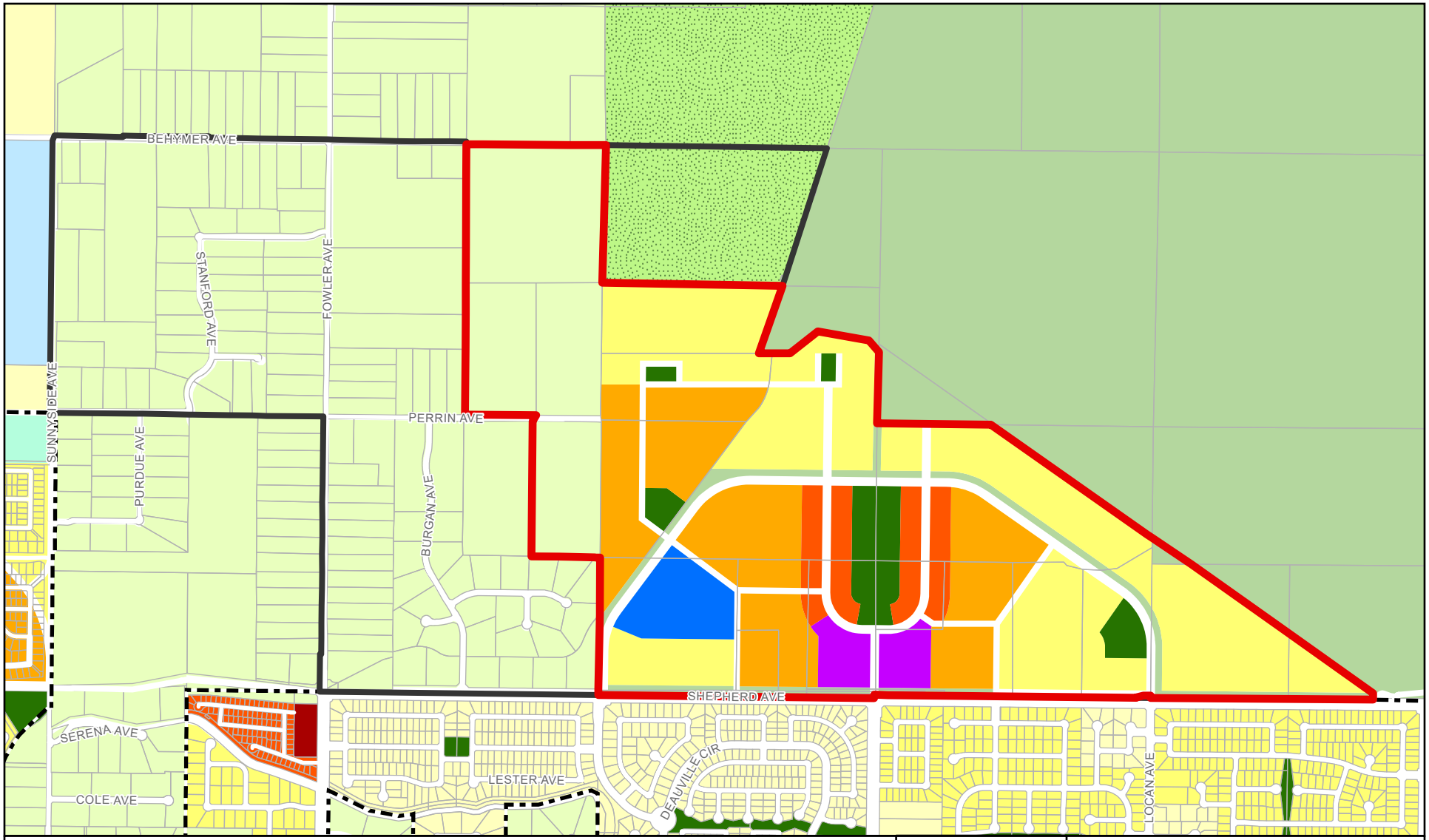
Sources: Fresno County GIS. ArcGIS Map Service. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 2.0-4. Aerial Photo of Project Site

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits

GPDesignation

- AG: Agriculture (1 DU/20 Ac)
- RR: Rural Residential
- VL: Very Low Density Residential
- L: Low Density Residential
- M: Medium Density Residential
- MH: Medium High Density Residential
- MU-V: Mixed Use Village
- GC: General Commercial
- OS: Open Space
- PK: Park
- P: Public/Quasi-Public Facilities
- S: School
- W: Water

Sources: Fresno County GIS. Map date: January 26, 2024.

N

0 400 800

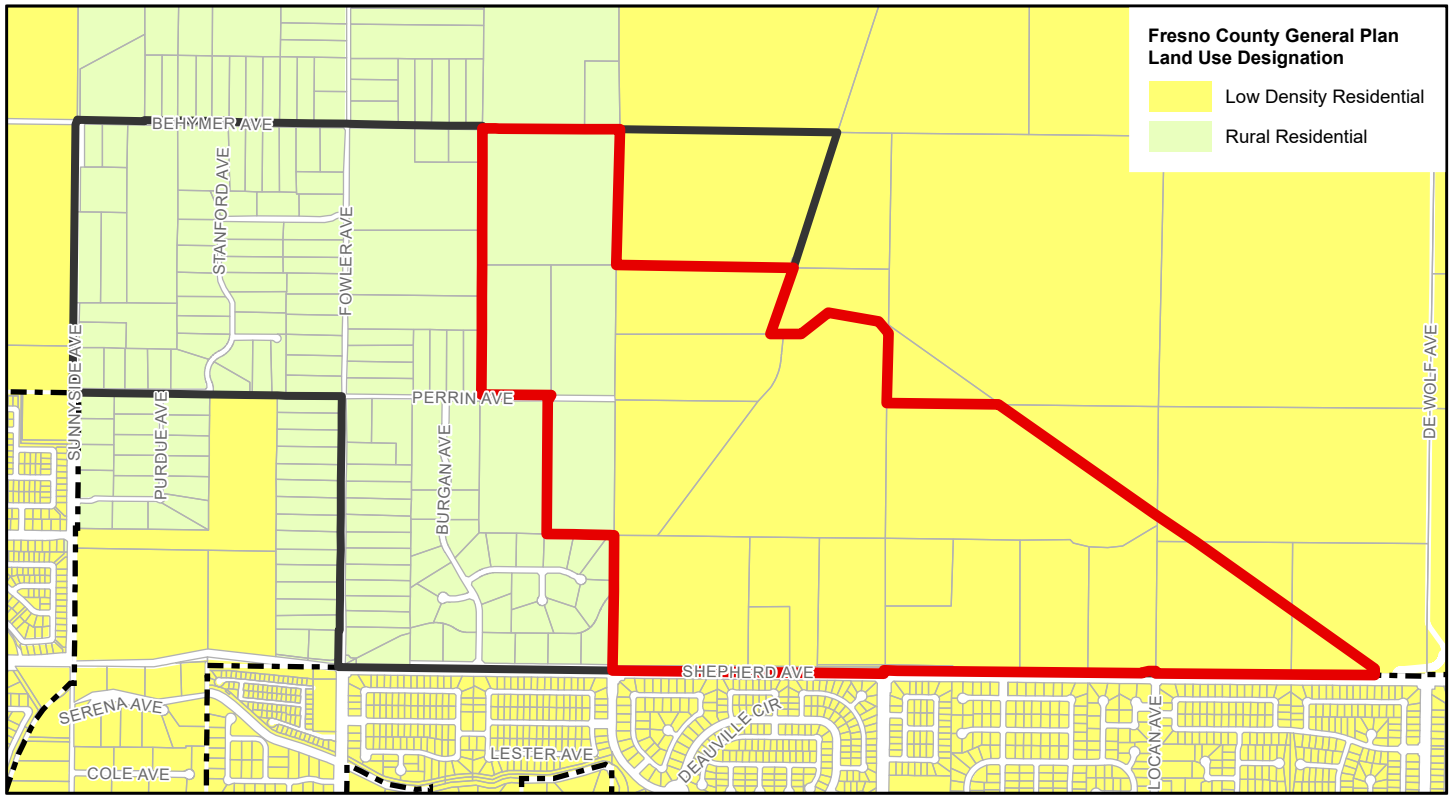
US Feet

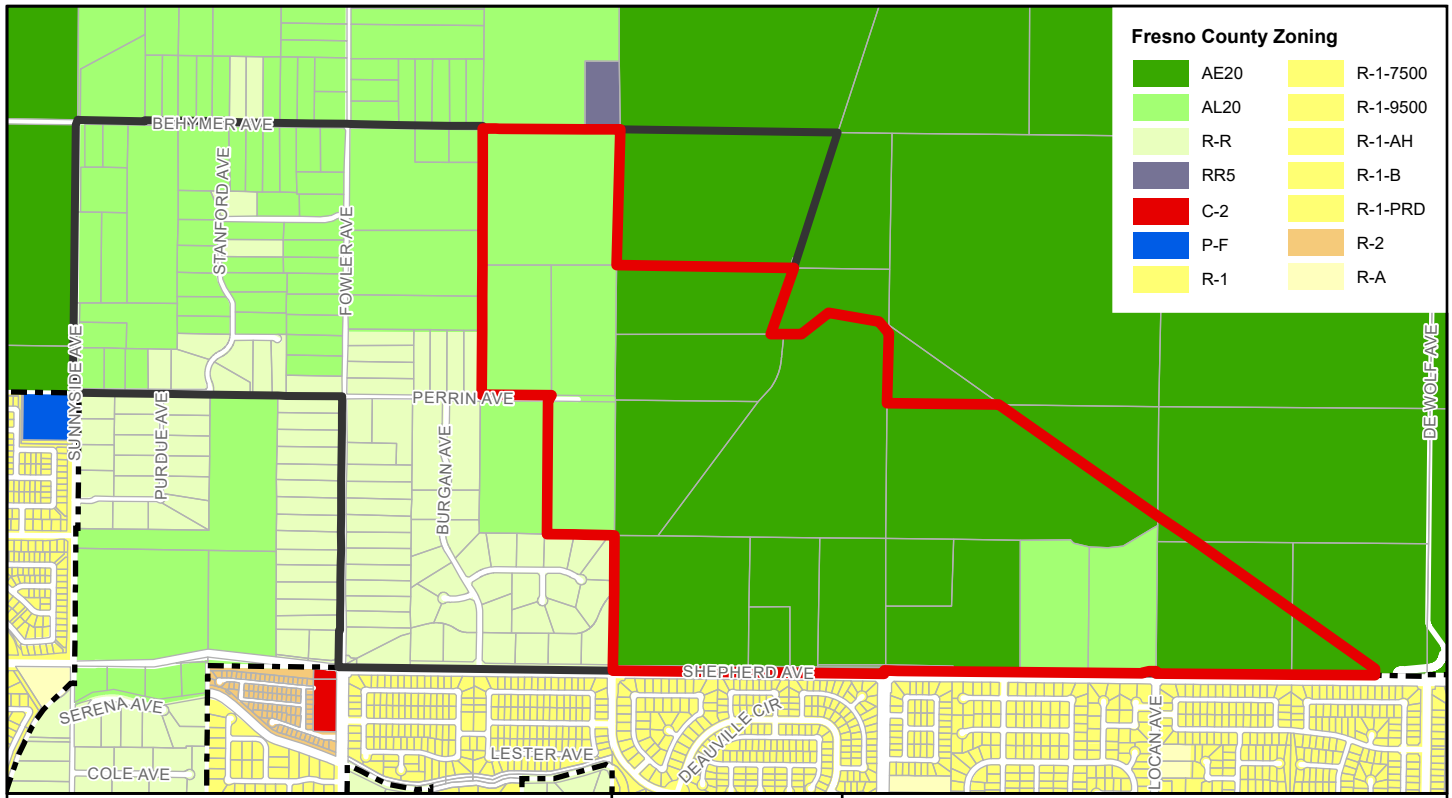
SOI Expansion Vista Ranch

Figure 2.0-5. Existing City Land Use Designations

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.





LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits

N

0 500 1,000

US Feet

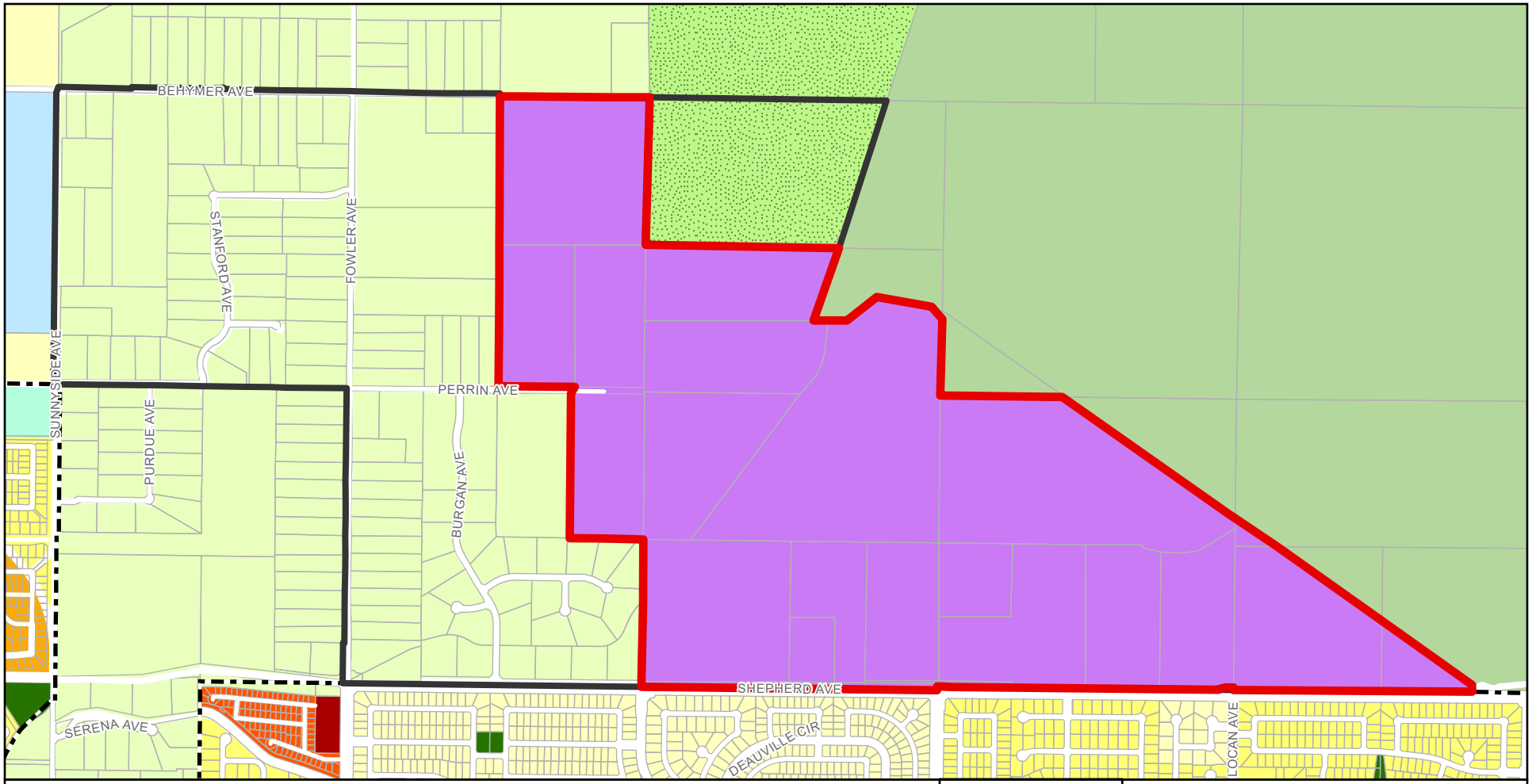
Sources: City of Clovis; Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 2.0-6. Existing County Land Use and Zoning

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits

GPDesignation

- AG: Agriculture (1 DU/20 Ac)
- RR: Rural Residential
- VL: Very Low Density Residential
- L: Low Density Residential
- M: Medium Density Residential
- MH: Medium High Density Residential
- MU-V: Mixed Use Village
- GC: General Commercial
- OS: Open Space
- PK: Park
- P: Public/Quasi-Public Facilities
- W: Water

N

0 500 1,000

US Feet

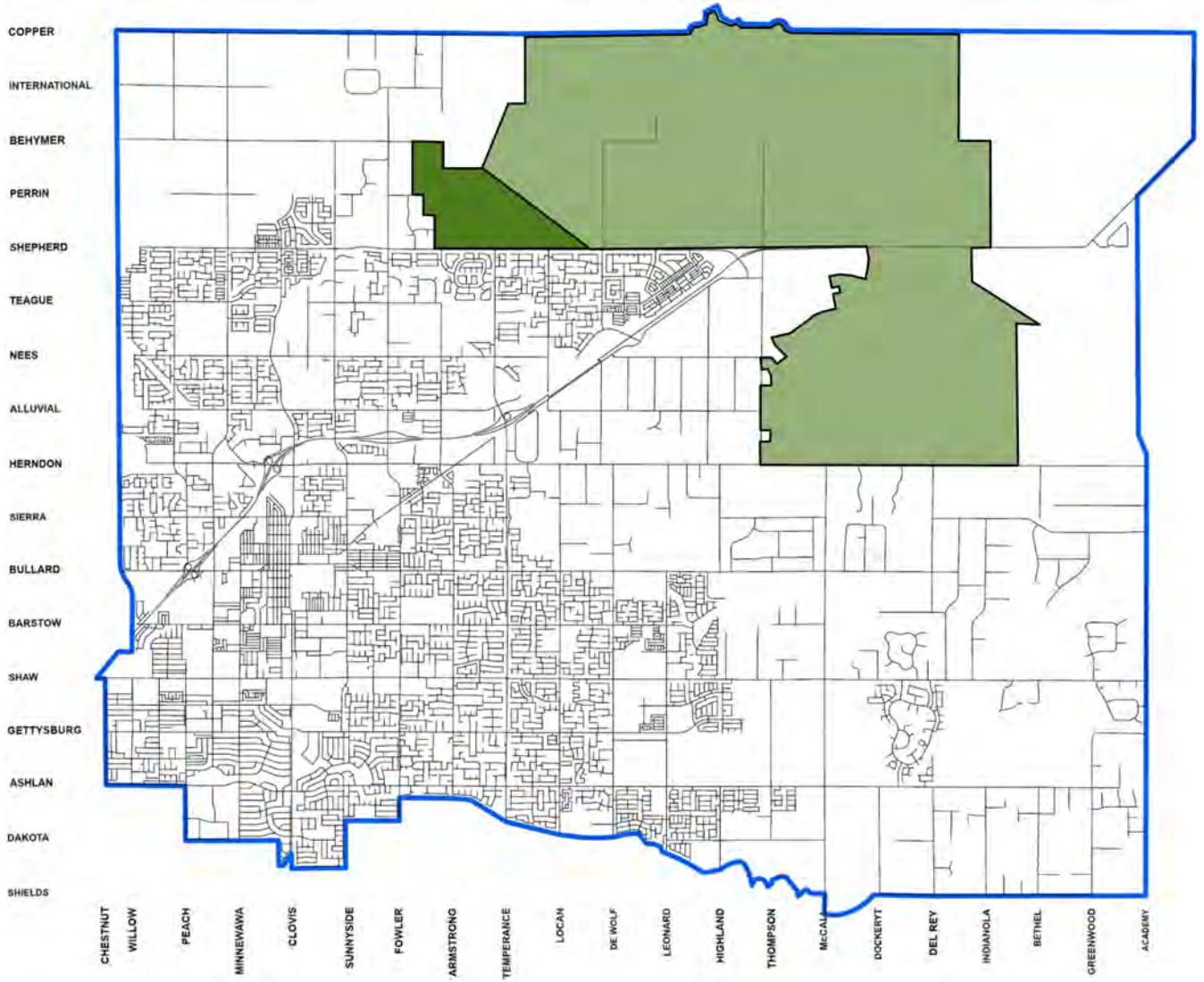
Sources: Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 2.0-7. Proposed General Plan Land Use Designations

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Focus Area 13
- Focus Area 13a
- Clovis Planning Area

SOI Expansion Vista Ranch

Figure 2.0-8. Focus Area 13

Sources: Kroll & Associates. Map date: June 21, 2024.

This Page Intentionally Left Blank.

LEGEND

R-1	LOW DENSITY RESIDENTIAL 2.1-5 DU/AC	C-R COMMUNITY RECREATION (PRIVATE) - MIXED USE
R-1-MD	MEDIUM DENSITY RESIDENTIAL 4.1-12 DU/AC	C-R COMMUNITY RECREATION (PUBLIC) - MIXED USE
R-2	MEDIUM DENSITY RESIDENTIAL 7.1-15 DU/AC	C-P ADMINISTRATIVE AND PROFESSIONAL OFFICE - MIXED USE
R-4	VERY HIGH DENSITY RESIDENTIAL 25.1-43 DU/AC	O PARK
R-1-MD	SCHOOL	O OPEN SPACE - TRAIL
C-1	GATEWAY NEIGHBORHOOD COMMERCIAL - MIXED USE	O OPEN SPACE - CORRIDOR

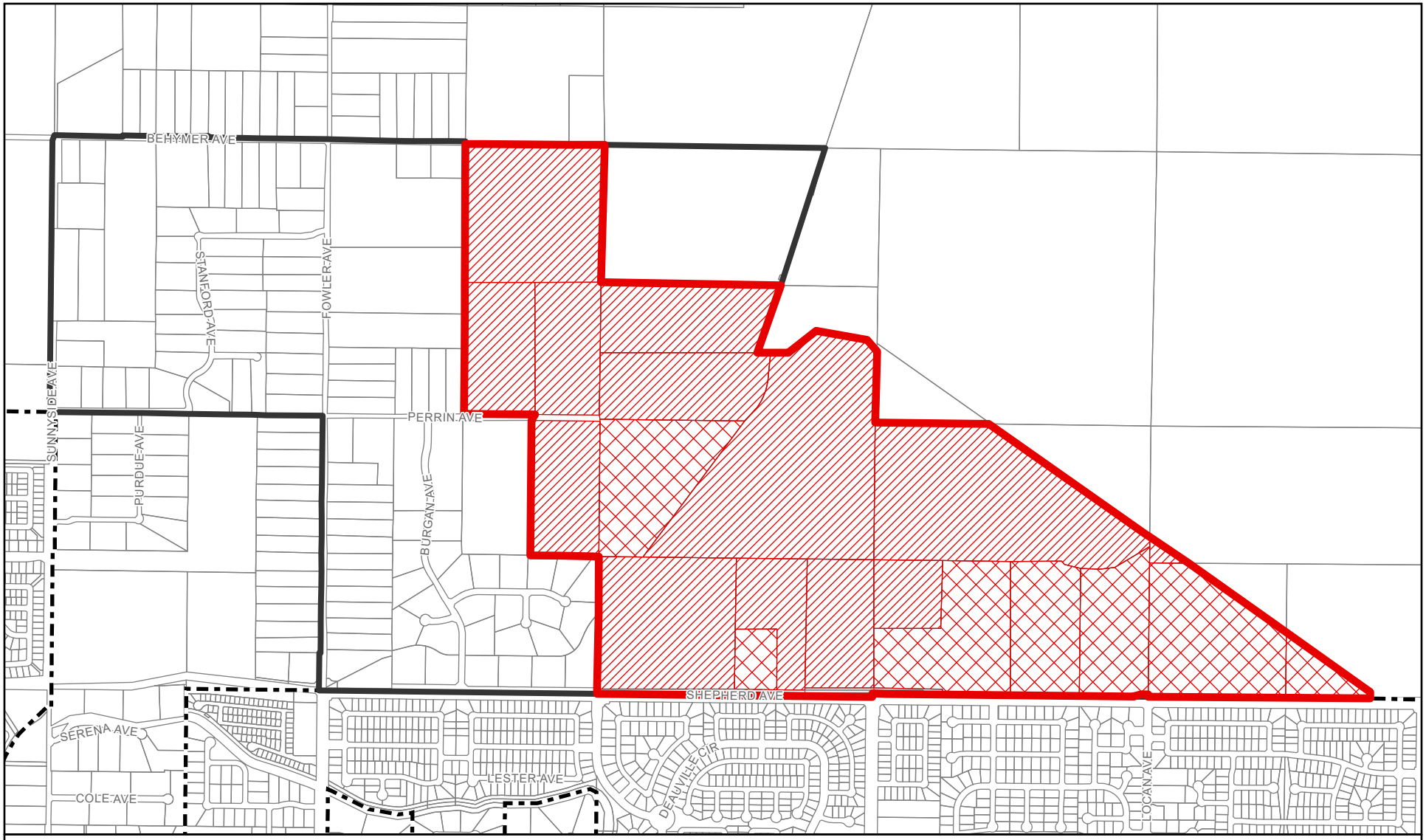
Sources: Kroll & Associates. Map date: September 7, 2023.

SOI Expansion Vista Ranch

Figure 2.0-9 Master Plan Zoning

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Master Plan Area
- MP Area 1
- MP Area 2
- SOI Expansion Area
- Clovis City Limits

SOI Expansion Vista Ranch

Figure 2.0-10. Planning Areas

Sources: Kroll & Associates. Map date: January 26, 2024.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.

In accordance with CEQA Guidelines Section 15126.2, this EIR identifies and focuses on the significant direct and indirect environmental impacts of the Vista Ranch Project, giving due consideration to its short- and long-term impacts. Short-term impacts are generally those associated with implementation of the Project, while long-term impacts are generally those associated with the operation of the Project components. As described in Chapter 1.0, this analysis focuses on environmental resource topics as provided in the CEQA Guidelines Appendix G Checklist.

ENVIRONMENTAL RESOURCES AREAS

The potential environmental impacts associated with implementation of the Project are evaluated for the following environmental resource areas:

- Aesthetics and Visual Resources
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural and Tribal Resources
- Geology, Soils and Minerals
- Greenhouse Gases, Climate Change and Energy
- Hazards and Hazardous Materials/Wildfire
- Hydrology and Water Quality
- Land Use, Population and Housing
- Noise
- Public Services and Recreation
- Transportation and Circulation
- Utilities

ORGANIZATION OF ENVIRONMENTAL RESOURCES AREAS

Chapter 3 provides an analysis of impacts for the environmental topics that the City determined could result in significant impacts and responses received during the scoping process, including the NOP review period and public scoping meeting. Sections 3.1 through 3.14 discuss the environmental impacts that may result from implementation of the Project. Where impacts are identified, recommendations for mitigation measures are proposed that, when implemented, would reduce significant impacts to less than significant. If an impact, with mitigation measures, cannot be reduced to a less than significant level it will be a significant and unavoidable impact. Each environmental issue area in Chapter 3 contains a description of the following:

- **Environmental Setting** presents the existing environmental conditions on the Project site and within the surrounding area as appropriate, in accordance with CEQA Guidelines Section 15125. The extent of the environmental setting area evaluated (the Project study area) differs among resources depending on the locations where impacts would be expected. For example, air quality impacts are assessed for the air basin (macroscale), as well as the Project vicinity (microscale); whereas aesthetic impacts are assessed for the Project vicinity

only. Methodologies are also included, where applicable, summarizing the resources, methods, procedures, and techniques used to evaluate proposed Project impacts.

- **Regulatory Setting** presents the laws, regulations, plans, and policies that are relevant to each issue area. Regulations originating from the federal, state, and local levels are each discussed as appropriate.
- **Thresholds of Significance** identifies the thresholds of significance used to determine the level of significance of the environmental impacts for each resource topic, in accordance with CEQA Guidelines Sections 15126, 15126.2, and 15143. The thresholds of significance used in this EIR are based on the checklist presented in Appendix G of the CEQA Guidelines; best available data; and regulatory standards of federal, state, and local agencies.
- **Impacts and Mitigation Measures** identify the level of each environmental impact by comparing the effects of the Project to the environmental setting. Key methods and assumptions used to frame and conduct the impact analysis, as well as issues or potential impacts not discussed further (i.e., such issues for which the project would have no impact), are described. Project impact thresholds are noted in bold text. An environmental impact statement precedes the discussion of each impact while its level of significance after mitigation succeeds the discussion of each impact. The discussion that follows the impact summary includes the substantial evidence supporting the impact significance conclusion.
- **Mitigation Measures** are included, where applicable, to describe any feasible measures that could avoid, minimize, rectify, reduce, or compensate for significant adverse impacts, with measures having to be fully enforceable through incorporation into the Project (PRC Section 21081.6[b]). Mitigation measures are not required for environmental impacts that are found to be less than significant. Where feasible mitigation for a significant environmental impact is available, it is described following the impact. Where sufficient feasible mitigation is not available to reduce environmental impacts to a less-than-significant level, or where the lead agency lacks the authority to implement the mitigation when needed, the impacts are identified as significant and unavoidable.
- **Level of Significance After Mitigation** describes the level of impact significance remaining after mitigation measures are implemented.
- **Cumulative Impacts** describes two or more individual impacts that, when considered together, are significant or that compound or increase other significant environmental impacts. Cumulative impacts can result from individually minor, but collectively significant projects taking place over time (State CEQA Guidelines Section 15355). The incremental impact of a project, although less than significant on its own, may be considerable when viewed in the cumulative context of other closely related past, present, and reasonably foreseeable probable future projects. A considerable contribution is significant for the cumulative impact analysis. Cumulative impacts are evaluated in Chapter 4.0, Other CEQA-Required Topics.

FORMAT OF THE IMPACT ANALYSIS

The analysis presents the potential impacts that could occur under the Project along with any supporting mitigation requirements. Each section identifies the resulting level of significance of the impact using the terminology described below following the application of the proposed mitigation.

The section includes an explanation of how the mitigation measure(s) would reduce the impact in relation to the applied threshold of significance. If the impact remains significant (i.e., at or above the threshold of significance), additional discussion is provided to disclose the implications of the residual impact and indicate why no mitigation is available or why the applied mitigation does not reduce the impact to a less-than-significant level.

Changes that would result from the Project were evaluated relative to existing environmental conditions within the Project site as defined in Chapter 2.0, Project Description. Existing environmental conditions are based on the publication date of the NOP on October 18, 2023. In evaluating the significance of these changes, this EIR applies thresholds of significance that have been developed using: (1) criteria discussed in the CEQA Guidelines; (2) criteria based on factual or scientific information; and (3) criteria based on regulatory standards of federal, state, and/or local agencies. Mechanisms that could cause impacts are discussed for each issue area.

This EIR uses the following terminology to denote the significance of environmental impacts of the Project:

- **No impact** indicates the implementation of the Project would not have any direct or indirect impacts on the environment. It means no change from existing conditions. This impact level does not need mitigation.
- A **less than significant impact** is one that would not result in a substantial or potentially substantial adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.
- A **less than significant impact with mitigation incorporated** is defined by CEQA Section 21068 as one that would cause "a substantial or potentially substantial, adverse change in any of the physical conditions within the area affect by the project." Levels of significance can vary by project, based on the change in the existing physical condition. Under CEQA, mitigation measures or alternatives to a project must be provided where feasible to reduce the magnitude of significant impacts.
- A **significant impact** is one that would result in a substantial or potentially substantial adverse effect on the environment, and that could not be reduced to a less-than-significant level even with any feasible mitigation. Under CEQA, a project with significant and unmitigable impacts could proceed; but the lead agency would be required to prepare a "statement of overriding considerations" in accordance with CEQA Guidelines CCR 14 Section 15093, explaining why the lead agency would proceed with a project despite the potential for significant impacts.

This Page Intentionally Left Blank.

This section of the EIR evaluates the Project's potential impacts on aesthetics and visual resources, including scenic resources, scenic vistas, visual character, and light and glare impacts. This section includes a discussion of the qualitative aesthetic characteristics of the existing environment that would be altered by Project implementation and the consistency of the Project with established relevant policies and regulations.

There were no comments received during the public review period or scoping meeting for the Notice of Preparation related to this environmental topic.

3.1.1 ENVIRONMENTAL SETTING

REGIONAL SCENIC RESOURCES

The City of Clovis is in California's San Joaquin Valley and possesses multiple scenic resources, including visual resources within the surrounding unincorporated areas of Fresno County. These resources enhance the quality of life for Clovis residents and provide for outdoor recreational uses.

Visual resources are generally classified into two categories: scenic vistas and scenic resources. Scenic vistas are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually mid-ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor. Scenic resources are specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic resource quality is an assessment of the uniqueness or desirability of a visual element.

Within the region, aesthetic features occur in many different settings within the region, such as urban centers, residential subdivisions, rural agricultural lands, and natural water bodies. Features of the built environment that may also have visual significance include individual or groups of structures that are distinctive due to their aesthetic, historical, social, or cultural significance or characteristics. Examples of the visually significant built environment may include bridges or overpasses, architecturally appealing buildings or groups of buildings, landscaped freeways, and a location where a historic event occurred.

SCENIC HIGHWAYS AND CORRIDORS

Scenic highways and corridors make major contributions to the quality of life enjoyed by the residents of a region. The development of community pride, the enhancement of property values, and the protection of aesthetically-pleasing open spaces reflecting a preference for the local lifestyle are all ways in which scenic corridors are valuable to residents.

Scenic highways and corridors can also strengthen the tourist industry. For many visitors, highway corridors will provide their only experience of the region. Enhancement and protection of these

corridors ensures that the tourist experience continues to be a positive one and, consequently, provides support for the tourist-related activities of the region's economy.[1]

Scenic Highways

A scenic highway is generally defined by Caltrans as a public highway that traverses an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural attributes. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

No officially designated State scenic highways are in the City of Clovis. The nearest "eligible" State scenic highway to the City is State Route (SR) 168, which is located over one mile to the south of the Project site at its closest point. The Project site is not visible from this roadway segment.[2]

Scenic Corridors

A scenic corridor is the view from a roadway that may include a distant panorama and/or the immediate roadside area. A scenic corridor encompasses the outstanding natural features and landscapes that are considered scenic. It is the visual quality of the man-made or natural environments within a scenic corridor that are responsible for its scenic value. Commonly, the physical limits of a scenic corridor are broken down into foreground views (zero to one quarter mile) and distant views (over one quarter mile). In addition to distinct foreground and distant views, the visual quality of a scenic corridor is defined by special features, which include:

- Focal points – prominent natural or man-made features which immediately catch the eye.
- Transition areas – locations where the visual environment changes dramatically.
- Gateways – locations which mark the entrance to a community or geographic area.

The following roadways serve as gateways to the community and important visual links to Old Town Clovis from the greater Fresno Area: Clovis, Shaw, and Herndon Avenues. Although the three identified corridors are quite long and contain substantial segments that do not provide scenic vistas, the corridors physically and visually tie the community together. Other arterial roadways that travel east-to-west through the City of Clovis, such as Shepherd, Bullard, and Ashlan Avenues, span the community's suburban/rural interface. These roadways provide a scenic and character transition through the nearly built-out core of Central Clovis into its pastoral agrarian areas to the north, east,

[1] California Department of Transportation, Scenic Highways, California State Scenic Highways. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed January 2024.

[2] California Department of Transportation, California Scenic Highway Map System. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed January 2024.

and south. Segments of these roadways in the Sphere of Influence are in transition from agrarian to urban.

Of the roadways discussed above, East Shepherd Avenue is located immediately south of the Project site and is developed to urban standards with few exceptions from Friant Road to the west to the intersection of SR 168 to the east. The views of the rolling grassy hills near the Friant-Kern Canal, pastoral agrarian areas, and the Sierra Nevada foothills to the east from the Shepherd Avenue corridor are highly valued by visitors and residents of Clovis.

LIGHT AND GLARE

During the day, sunlight reflecting from structures is a primary source of glare, while nighttime light and glare can be divided into both stationary and mobile sources. Stationary sources of nighttime light include structure illumination, interior lighting, decorative landscape lighting, and streetlights. The principal mobile source of nighttime light and glare is vehicle headlamp illumination. This ambient light environment can be accentuated during periods of low clouds or fog.

The variety of developed and inhabited land uses in the City of Clovis are the main source of daytime and nighttime light and glare. They are typified by single and multi-family residences, commercial structures, industrial areas, and streetlights. These areas and their associated human activities, such as vehicular traffic, characterize the existing light and glare environment present during daytime and nighttime hours in the urbanized portions of the City. Sources of light and glare in the City of Clovis include building (interior and exterior), security, sign illumination, and parking-area lighting. Other sources of nighttime light and glare include streetlights and vehicular traffic along surrounding roadways.

Additionally, it is recognized that there is a significant amount of ambient lighting from surrounding communities and roadways in Clovis. As the City of Clovis is adjacent to highly urbanized portions of the City of Fresno to the west and south, ambient light in the community is substantially impacted by land uses in Fresno. Large, light-intensive institutions and facilities near the City's boundary include Fresno Yosemite International Airport and Cal State University Fresno.[3] Nevertheless, areas within the Project site and SOI are mainly rural residential and agricultural land and are more distant from the more developed and inhabited areas of Clovis and Fresno. As such, the Project site and SOI have very few sources of light and glare, allowing for clear day and nighttime views.

Sources of glare in developed and inhabited portions of the City come from light reflecting off surfaces, including glass and car windshields, and certain siding and paving materials, as well as metal roofing. The developed and inhabited areas of Clovis contain streetlights, sidewalks, and paved parking areas, which reflect street and vehicle lights. The developed rural residential areas of Clovis (including unincorporated County) generally do not contain streetlights or sidewalks but

[3] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

typically have dirt or gravel parking areas on the property frontage with reflective properties. The existing light and glare environment found in the vicinity of the Project site is considered typical of suburban and rural residential areas. The existing suburban lighting exists along Shepherd Avenue immediately south of the Project site. Streetlights are installed on the south side of this street along the entire southern boundary. The north side of Shepherd Avenue does not have street lighting installed currently, but lighting is proposed as a Project design measure.

To the north of Shepherd Avenue, in the Non-Development Area of the Project site, is a mix of rural residential areas, which have a lower intensity of lighting then what is common in the suburban neighborhoods in the vicinity. These existing rural residential areas abut the western boundary of the Master Plan Area. Immediately to the north and east of the Master Plan Area is vacant undeveloped land that has essentially no nighttime lighting.

These rural residential areas have typical residential building lighting (i.e., lights on the building structure in the front and backyard, landscaping lighting, and indoor lighting) like the suburban neighborhoods, but there is a lower density of buildings, so overall lighting intensity is lower in these areas as compared to the surrounding suburban lighting. Additionally, some of the rural residential areas do not have street lighting, unlike more intensively developed areas in the vicinity (i.e., neighborhoods south of Shepherd Avenue). However, these areas are typical of developed residential areas within and immediately outside the City of Clovis, where rural residential neighborhoods are often located adjacent to suburban or inhabited areas. The mix of lighting is typical of many suburban or inhabited neighborhoods along the periphery of the City.

Sky glow is the effect created by light reflecting into the night sky. Sky glow is of particular concern in areas surrounding observatories, where darker night sky conditions are necessary, but it is also of concern in more rural or natural areas where a darker night sky is either the norm or is important to wildlife. Developed areas have existing light sources that illuminate the night sky. In other words, sky glow is considered part of the existing conditions (i.e., the baseline conditions under CEQA). Sky glow can increase significantly based on certain intensive uses—such as a project that contemplates stadium lights, spotlights, and strobe lights.

VISUAL CHARACTER AND SCENIC RESOURCES

Visual Character

The City of Clovis is in California's San Joaquin Valley, and like most communities in the region, features a flat landscape organized around an orthogonal system of roadways. Due to its rapid growth in recent years and its adjacency to the City of Fresno, Clovis has a largely suburban character. Most of the City's land area is devoted to low density residential neighborhoods. However, because the community has grown from a small farming town and is still surrounded by agricultural land uses on three sides, it retains a rural atmosphere. The suburban/rural interface is most prominent on the City's eastern, southeastern, and southern edges. In these locations, new housing subdivisions are sited between working farms and large residential estate lots of two to five acres. The SOI beyond the City's Limits to the east, northeast, and north is dominated by agricultural

uses and undeveloped open spaces. The Project site is in the north, and the immediately surrounded area is best characterized as a mix of agricultural, suburban residential, and large estate lots with existing residences.[4]

Other Scenic Resources Areas

The foothills and the mountains of the Sierra include a scenic backdrop for the City. The Sierra Nevada also provides a broad array of recreational opportunities to residents of Clovis and is directly accessible from the City via SR 168 or the "Sierra Freeway," which is a limited access roadway in urbanized Fresno and Clovis that bisects the City of Clovis. Natural resources in the Sierra Nevada foothills near Clovis include Millerton Lake State Recreation Area 14 miles to the north and Pine Flat Lake 30 miles to the east. The City itself contains no substantial, undeveloped natural resources other than the grasslands in its northeastern quadrant, north of Shepherd Avenue and Tollhouse Road/SR 168. Outside of this area, there are only remnants of native habitats and vegetation communities. However, irrigation canals throughout the City provide a scenic quality to the rural character of the region. Clovis also features numerous improved parks and green space areas that offer greenery and recreational opportunities to residents, such as the botanical gardens and a network of multipurpose trails. These open spaces also provide visual buffers that break up the monotony of the built environment.[5]

Rolling grassy hills are in the City's northeastern quadrant, north of Shepherd Avenue and Tollhouse Road/SR 168 near the Friant-Kern Canal. These hills are outside the City and SOI boundaries. Grade separations along SR 168, generally located at major interchanges, create some artificial changes in topography that offer limited views of the Sierra Nevada Mountains to the east. However, the remainder of the Clovis area is relatively flat and provides clear views of the Sierra Nevada Mountains. Agricultural lands have become important visual resources that also contribute to the community identity of Clovis and the Central Valley region. Agricultural lands provide for visual relief form urbanized areas and act as community separators to nearby urban areas.

PROJECT SITE

The Project site includes several distinct planning boundaries. The following terms are used throughout this document to describe planning area boundaries within the Project site:

- **Project Area:** Includes the whole of the Project site (approximately 952 acres), all of which is currently located in the City's Planning Area and would be incorporated into the City's sphere of influence (SOI). The Project area includes (1) the approximately 507-acre Vista

[4] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

[5] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

Ranch Master Plan and (2) the approximately 445-acre Non-Development Area, both of which are described below.

- **Vista Ranch Master Plan (Master Plan):** Includes approximately 507 acres located entirely within the Project Area. The Master Plan contemplates the construction of up to 3,286 residential units, approximately 16 acres of commercial/mixed-uses, approximately 19 acres for an elementary school site, approximately 32 acres for a mini-storage, and approximately 59 acres of parks, trails, and open space. The Master Plan is divided into two distinct planning areas, as further defined below: (1) MPArea 1, an approximately 368-acre area proposed for immediate development, and (2) MPArea 2, the remaining approximately 139 acres that is anticipated for future development.
- **MPArea 1 (Development Area):** MPArea 1 includes approximately 368 acres proposed to be developed by Wilson Premier Homes, Inc. Most of the Development Area has been planned for urban uses and is included in the area designated as the Northeast Urban Center in the City's 1993 General Plan and subsequent General Plan updates. Consistent with that vision, the approximately 368-acre Development Area would consist of a mix of urban uses, including 2,500 to 2,718 residential units, non-residential uses for future gateway neighborhood commercial uses and community recreational facilities up to 133,000 square feet in size, and approximately 43 acres of parks, trails, and open space.
- **MPArea 2:** MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan. MPArea 2 also plans for a mix of urban uses as part of the Northeast Urban Center under the City's 1993 General Plan and subsequent General Plan updates.
- **Non-Development Area:** The Non-Development Area includes approximately 445 acres that have not requested, nor would receive, any entitlements other than to be included in the SOI expansion.

As described in Chapter 2.0, *Project Description*, of this EIR, the Project site currently consists of 139 Assessors Parcels, comprised of a combination of fallow and grazing land, several rural residences, offices for Contractor's Corp Yard, and small tree nursery. The proposed Master Plan portion of the Project site is bifurcated by the Big Dry Creek Reservoir Outlet Works Channel.

East Shepherd Avenue, along the southern boundary, is identified as an Expressway in the Clovis General Plan Circulation Plan and is partially improved to an urban level adjacent to the Project site. There are electrical poles visible along East Shepherd Avenue, bisecting properties, as well as a variety of wooden, wire and other fencing surrounding dry fields and the Contractor's Corp Yard and small tree nursery.

East Perrin and East Behymer Avenues are Fresno County roads and located adjacent to several of the parcels within the Project area. East Perrin and East Behymer Avenues both provide access to North Fowler Avenue, which is also a County Road. East Behymer Avenue also extends to North Sunnyside Avenue.

The Non-Development Area contains existing rural residential residences and agricultural fields. The Non-Development Area is located within the City of Clovis' Planning Area but is outside of the City's existing SOI.

The Project site is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land and open space land uses. Uses immediately east of the Project site consist of the Big Dry Creek Reservoir, and an existing earthen dam, owned and operated by the Fresno Metropolitan Flood Control District. Uses immediately south of the Project site are primarily single-family residential, as the southern side of East Shepherd Avenue is already improved with single-family residences in a planned community. Uses immediately west and north of the Project site are primarily rural residential on larger lots and fallow or grazing properties. The northern side of East Shepherd Avenue continues in a largely unimproved manner until the intersection with Armstrong Avenue, where larger single-family rural residences on larger lots have been constructed, immediately along the western boundary of the Development Area.

There are minimal existing light sources on and adjacent to the Project site. Light sources are limited to the existing residential homes, roadway, and accessory structures adjacent to the Project Site.

Lastly, the General Plan EIR identifies other arterial roadways that travel east/west through the City as being construed as a scenic corridor. This includes Shepherd Avenue, specifically referring to views of the rolling grassy hills near the Friant-Kern Canal, pastoral agrarian areas to the north, and the Sierra Nevada foothills to the east of the Project site. Shepherd Avenue runs directly across the south boundary of the Project site, however; the highest scenic qualities along Shepherd Avenue occur to the east of the Project site in the areas that are largely undeveloped with residences. It is noted that the General Plan EIR considered development of the Master Plan Area within the General Plan study area and concluded that the development would result in a less than significant environmental impact.

3.1.2 REGULATORY SETTING

FEDERAL

There are no applicable federal regulations, plans or policies pertaining to aesthetics that are applicable to the Project.

STATE

California Scenic Highway Program

The intent of the California Scenic Highway Program is "to protect and enhance California's natural scenic beauty and to protect the social and economic values provided by the State's scenic resources." The California Department of Transportation (Caltrans) administers the program, which was established in 1963 and is governed by the California Streets and Highways Code §260 et seq. The goal of the program is to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of the adjacent land. Caltrans has compiled a list of State highways that

are designated as scenic and county highways that are officially designated or eligible for designation as scenic. Scenic highway designation can provide several types of benefits to the region. Scenic areas are protected from encroachment of inappropriate land uses, free of billboards, and are generally required to maintain existing contours and preserve important vegetative features. Only low-density development is allowed on steep slopes and along ridgelines on scenic highways, and noise setbacks are required for residential development.[6]

To obtain an official "Scenic Highway" designation, the State and Caltrans require a responsible local agency or Local Governing Body (LGB) to prepare a Scenic Corridor Protection Plan. In the Clovis area, Fresno County is the LGB. Corridor protection programs are required to contain the following five elements, which have been included in the Fresno County's policies:

- Regulations of land use and density of development;
- Detailed land and site planning;
- Control of outdoor advertising;
- Careful attention to and control of earthmoving and landscaping; and
- The design and appearance of structures and equipment.[7]

Caltrans monitors State-designated scenic routes to ensure each local jurisdiction's consistency with State guidelines. Specifically, Caltrans District Scenic Highway Coordinator (DSHC) will review a scenic highway for compliance every five years, but can recommend the revocation of scenic designation at any time. To enforce the program, the DSHC will contact the responsible local agency or LGB, in this case, Fresno County. The LGB must either respond by submitting its current Corridor Protection Program or a letter of intent to request a revocation of the scenic designation. The DSHC reviews the submittal and takes corrective action to resolve any issues of non-compliance, certifies compliance, or recommends revocation of scenic designation. It should be noted that the project is not located along a scenic highway.

California Code of Regulations, Title 24, Part 6

Title 24 of the California Code of Regulations (CCR), Part 6, also known as the California Building Efficiency Standards for Residential and Nonresidential Buildings, consists of regulations to control building standards throughout California. It includes mandatory provisions for lighting control

[6] California Department of Transportation, Scenic Highways, California State Scenic Highways. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed January 2024.

[7] California Department of Transportation, Scenic Highways – Frequently Asked Questions. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways/lap-liv-i-scenic-highways-faq2. Accessed January 2024.

devices and luminaires for all new developments, thereby encouraging energy efficient development strategies and the methods to prevent light spillover and intrusion.[8]

LOCAL

County of Fresno Code of Ordinances

The County of Fresno Code of Ordinances identifies land use categories, development standards, and other general provisions that ensure consistency between the County's General Plan and proposed development projects. The following provisions address aesthetics:

- Title 17, Chapter 17.48 (Design and Development Standards): Outlines design and improvement standards for roads, lots, easements, and waterways in the county to provide for adequate traffic circulation and extension of aesthetic values.[9]
- Title 17, Chapter 17.72, Part IV (Design Principles): Provides details to size and configuration of parcels upon division of land to maintain land use compatibility and to efficiently utilize adjacent parcels for future development.[10]

City of Clovis General Plan

The 2014 City of Clovis General Plan includes several policies that are relevant to an evaluation of the visual quality of the Project site. The General Plan policies applicable to the Project are identified below[11]:

Policies: Land Use Element

- LU-Policy 3.6. Mix of housing types and sizes. Development is encouraged to provide a mix of housing types, unit sizes, and densities at the block level. To accomplish this, individual projects five acres or larger may be developed at densities equivalent to one designation higher or lower than the assigned designation, provided that the density across an individual project remains consistent with the General Plan.
- LU-Policy 4.3. Future environmental clearance. The city shall monitor development and plan for additional environmental clearance as development levels approach those evaluated in

[8] California Energy Commission, Building Energy Efficiency Standards for Residential and Nonresidential Buildings, August 2022. Available at: https://www.energy.ca.gov/sites/default/files/2022-12/CEC-400-2022-010_CMF.pdf. Accessed January 2024.

[9] Fresno County Code of Ordinances. Title 17, Chapter 17.48, Design and Improvement Standards. Available at: https://library.municode.com/ca/fresno_county/codes/code_of_ordinances?nodeId=TIT17DILA_CH17.48DEIMST_17.48.020RODEAY. Accessed January 2024.

[10] Fresno County Code of Ordinances. Title 17, Chapter 17.72 Part IV, Design Principles. Available at: https://library.municode.com/ca/fresno_county/codes/code_of_ordinances?nodeId=TIT17DILA_IVDEPR. Accessed January 2024.

[11] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed January 2024.

the General Plan EIR.

- LU-Policy 4.4. Farmland conservation. Participate in regional farmland conservation, including the establishment of comprehensive agricultural preserves or easements, through efforts such as the Fresno County Model Farmland Conservation Program or the San Joaquin Valley Greenprint.

Policies: Circulation Element

- CIR-Policy 3.10 Pedestrian access and circulation. Entrances at signalized intersections should provide sidewalks on both sides of the entrance that connect to an internal pedestrian pathway to businesses and throughout nonresidential parking lots larger than 50 spaces.
- CIR-Policy 3.11 Right-of-way design. Design landscaped parkways, medians, and right-of-ways as aesthetic buffers to improve the community's appearance and encourage non-motorized transportation.
- CIR-Policy 3.12 Residential orientation. Where feasible, residential development should face local and collector streets to increase visibility and safety of travelers along the streets, and encourage pedestrian and bicycle access.
- CIR-Policy 5.3 Pathways. Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger.

Policies: Open Space and Conservation Element

- OSC-Policy 1.1 Parkland standard. Provide a minimum of 4 acres of public parkland for every 1,000 residents.
- OSC-Policy 1.3. New parks and recreation facilities. Provide a variety of parks and recreation facilities in underserved and growing areas of the community.
- OSC-Policy 1.5. Multipurpose open space. Design public facilities as multipurpose open space and recreation to serve the community's infrastructure needs while preserving and enhancing open space and water features. Prioritize the use of existing basins for existing areas, and for future areas prioritize the development of separate park facilities available year round.
- OSC-Policy 2.2. New development. Encourage new development to incorporate on-site natural resources and low impact development techniques.
- OSC-Policy 2.3. Visual resources. Maintain public views of open spaces, parks, and natural features. Enhance views along roadways and trails. Preserve Clovis' viewshed of the surrounding foothills and orient new development to capitalize on views of the Sierra Nevada.
- OSC-Policy 3.4. Drought-tolerant landscaping. Promote water conservation through the use of drought-tolerant landscaping on existing and new residential properties. Require drought-tolerant landscaping for all new commercial and industrial development and city-maintained landscaping, unless used for recreation purposes.

City of Clovis Municipal Code

Chapter 9.28, *Landscaping Standards,* of the City Municipal Code contains standards and provisions related to landscaping design requirements that would apply to the proposed Project. The primary intent of Chapter 9.28 Landscaping Standards, is to enhance the appearance of all development by

providing standards relating to the quality, quantity, and functional aspects of landscaping and landscape screening; protect public health, safety, and welfare by minimizing the impact of all forms of physical and visual pollution, controlling soil erosion, screening incompatible land uses, preserving the integrity of existing residential neighborhoods, and enhancing pedestrian and vehicular traffic and safety; and decrease the use of water for landscaping purposes by requiring the efficient use of irrigation, appropriate plant materials, and regular maintenance of landscaped areas.[12]

Section 9.22.050, *Exterior light and glare*, of the Clovis Development Code contains standards and provisions related to exterior lighting, which requires that light be shielded so that light does not spill onto adjacent properties; are architecturally integrated with the character of on-site and adjacent structures; and incorporate appropriate height, intensity, and scale to the uses they are serving.[13]

Section 9.24, *Property Development and Use Standards*, includes provisions which are designed to ensure that all development in the City is implemented in a stable and desirable manner that is harmonious with existing and future development, protecting the use and enjoyment of neighboring properties, consistent with the General Plan.[14]

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on aesthetics if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- In non-urbanized 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 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; and/or

[12] City of Clovis Municipal Code, Chapter 9.28, Development and Operational Standards. Landscaping Standards. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0928.html#9.28. Accessed January 2024.

[13] City of Clovis Municipal Code, Chapter 9.22.050, Development Code, Performance Standards, Exterior Light and Glare. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0922.html#9.22.050. Accessed January 2024.

[14] City of Clovis Municipal code, Chapter 9.4, Property Development and Use Standards. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0924.html#9.24.090. Accessed January 2024.

- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The evaluation of aesthetics and aesthetic impacts is highly subjective, yet it requires the application of a process that qualitatively, but objectively, identifies the visual features of the existing environment and their importance. The characterization of aesthetics involves establishing qualitatively describing the existing visual character, including resources and scenic vistas unique to the Project site and vicinity. Visual resources are determined by identifying existing landforms (e.g. topography and grading), views (e.g. scenic resources such as natural features or urban characteristics), viewing points/locations, and existing light and glare (e.g. nighttime illumination). Changes to the existing aesthetic environment that would result due to implementation of the proposed Project are identified and qualitatively evaluated based on the proposed modifications to the existing setting and the viewer's sensitivity. Project-related impacts are compared to the context of the existing setting, using the thresholds listed above. The following impact analysis addresses thresholds of significance.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Project implementation may result in substantial adverse effects on scenic vistas and resources or substantial degradation of visual character. (Less than Significant)

The proposed Project consists of the expansion of the SOI to add approximately 952 acres into the City's SOI, including the approximately 507-acre Vista Ranch Master Plan and the approximately 445-acre Non-Development Area. As described above, the Master Plan would include a mix of residential, commercial/mixed-uses, an elementary school, and parks, trails, and open space. The Non-Development Area includes approximately 445 acres that have not requested, nor would receive, any entitlements other than to be included in the SOI expansion, and as such, no new development or improvements are proposed as part of this Project for the Non-development Area. Therefore, the existing visual character of the Non-development Area would not change as part of this proposed Project.

Development of the proposed Project would change the visual character of the Project site, as it would convert the approximately 507-acre Master Plan area from its existing use, which consists of a combination of fallow and grazing land, several rural residences, offices for Contractor's Corp Yard and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described above, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses.

The Project site is not designated as a scenic vista by the City of Clovis General Plan or the Fresno County General Plan, nor does it contain any unique or distinguishing features that would qualify the site for designation as a scenic vista. However, the City's General Plan EIR states that East

Shepherd Avenue can be construed as a scenic corridor under the General Plan Open Space and Conservation Element.[15]

The City's General Plan EIR notes that new development will impact current views of open space, which are primarily vistas of agricultural fields and orchards. These publicly available views are primarily available to motorists traveling along East Shepherd Avenue, as well as East Behymer, East Perrin Avenue, and North Fowler Avenue, which is currently the only publicly accessible roadway within the Development Area.

Implementation of the proposed Project would change the existing visual character of the Development Area from primarily rural to a developed suburban neighborhood, like existing surrounding uses south of East Shepherd Avenue and to the west of the Master Plan area. These impacts related to a change in visual character may be considered "attractive" to one viewer and "unattractive" to other viewers. It is noted that the Clovis General Plan EIR concluded that adoption of the General Plan, which contemplated urbanization of the agricultural lands within the General Plan study area, was a less than significant impact.[16]

Policy 2.3 of the Clovis General Plan Update's Open Space and Conservation Element calls for the preservation of scenic vistas, corridors, and scenic resources, such as maintaining public views of open spaces, parks, and natural features; enhancing views along roadways and trails; preserving Clovis' viewshed of the surrounding foothills; and orienting new development to capitalize on views of the Sierra Nevada range. Project implementation would not result in structures that would create an obstruction to publicly available scenic vistas, particularly along East Shepherd Avenue, as any new development would be required to comply with height restrictions, setbacks and other provisions which would ensure that such views would be maintained.

The City of Clovis Municipal Code also includes development standards related to landscaping and screening, in Sections 9.24 and 9.28, including requirements for fences, walls, and hedges to ensure that these elements minimize screening of scenic views and sunlight by outlining provisions, such as height limitations, design and construction materials, site plan review requirements, allowable fencing materials, etc. Furthermore, screening and buffering requirements of adjoining land uses, utility equipment, and refuse areas are provided. The proposed Project would be developed in accordance with all applicable Municipal Code provisions and requirements, thereby ensuring that implementation of the proposed Project would not have a substantial adverse impact on scenic vistas, corridors, or resources in the City of Clovis.

[15] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed January 2024.

[16] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

The largely rural character of the Master Plan area can be considered to provide visual relief from urban development and defining the regional character. The proposed Project would permanently remove existing uses in the Master Plan area, which are largely rural in character, and it would introduce new development and supporting infrastructure, which would be extended into the Master Plan area; however, the surrounding areas to the south, west and north of the Master Plan area are already developed with urban and residential uses. Furthermore, the Project proposes to include 59 acres of parks, trails and preserved open space uses, which would provide visual relief to new development within the Master Plan area.

Under some circumstances, loss of rural and agricultural lands could have an adverse cumulative impact on the overall visual character and quality of a region; however, the remaining rural uses in the Development area are largely unused or used for grazing, and the existing structures and their frontages are not well maintained and underutilized. Furthermore, the Development Area is already surrounded by developed homes to the west, north, and south, demonstrating that much of the immediately surrounding vicinity has already changed its aesthetic character to suburban residential. While the proposed Project would change the existing aesthetic of the Development area to a more suburban nature, consistent with City of Clovis requirements, the current suburban theme would be extended with Project implementation.

It is important to note that while the visual character of the Master Plan area would be changing with future implementation of the proposed Project, the resulting development would be visually compatible with the aesthetics of the surrounding vicinity and would not result in a degradation of visual character. All development would be conducted in accordance with applicable City and County requirements, including landscaping, design, and streetscape requirements. The Plan area would not only consist of residential and suburban development, as it would include approximately 57 acres of parks trails and open space, as well as a 19-acre elementary school. These uses would provide visual relief and natural areas within the Master Plan area.

To reduce the potential for visual impacts to occur, development within the Master Plan area would be consistent with the General Plan, the Clovis Municipal Code and Zoning Ordinance, Master Plan, as described above. These standards include specifications for building height, massing, and orientation, exterior lighting standards, and landscaping standards. Compliance with the City's design, construction, and maintenance requirements is intended to result in an internally cohesive Project, which would maintain an aesthetic feel like that of the surrounding urban uses.

During construction of the Project, visual impacts would be temporary and intermittent over the phased construction period. Short-term impacts associated with Project construction would occur as construction equipment, materials movement, and new vehicular access and traffic sources are added to the Project Site and surrounding area. This would be visible to residential uses and other drivers using adjacent area roadways. As individual construction phases are completed, the amount of equipment would be reduced and moved to other areas of the Project Site during later phases. As such, the visual characteristics of construction would be spread out to different locations within a large area. Due to the temporary, varied, phased, and intermittent nature of construction

activities, impacts to visual character and publicly available views would be short term, phased, and spread over different areas of the Project Site, thereby reducing the visual impacts of construction activities. Therefore, construction impact would be less than significant.

The visual loss of rural land in the Master Plan area would result in a permanent change to the visual character of the Project site in perpetuity; however, compliance with General Plan policies, as well as the City Municipal Code related to the design, construction, and maintenance of the Project, would be required. City Municipal Code Title 9, Development Code Division 3, includes a series of Development and Operational Standards which are intended to minimize and mitigate the potential impacts of development within the City and promote compatibility with surrounding areas and land uses. These standards include requirements related to exterior light and glare (Section 9.22.050), fences, walls, and hedges (Section 9.24.060), height measurement and height limit exceptions (9.24.080), screening and buffering (Section 9.24.090), setback regulations and exceptions (Section 9.24.100), landscaping standards (Chapter 9.28), tree protection standards (Chapter 9.30), and signs (Chapter 9.34). Some of these standards and requirements from pre-existing regulations are implemented after Project entitlement, when more detailed site planning, engineering, and architecture is performed.

The Municipal Code implements the policies of the Clovis General Plan by classifying and regulating the uses of land and structures within the City of Clovis. The Municipal Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City. These existing requirements provide standards for the orderly growth and development of the City to establish and maintain the community's history and quality characteristics in appropriate locations. It requires high quality planning and design for development that enhances the visual character of the City, avoids conflicts between land uses, encourages the appropriate mix of uses, and preserves the scenic qualities of the City. It also creates a comprehensive and stable pattern of land uses upon which to plan sewerage, transportation, water supply, and other public facilities and utilities. Overall, these mandatory requirements are effective in reducing potential visual impacts. Compliance with all applicable regulations would reduce potential impacts related to scenic resources and visual character resulting from Project implementation. Compliance with the applicable regulations would therefore reduce potential impacts related to effects on scenic vistas and resources or substantial degradation of visual character resulting from Project implementation and thus, would be **less than significant**, and no mitigation is required***.***

Impact 3.1-2: Project implementation may substantially damage scenic resources within a State Scenic Highway. (Less than Significant)

There are no designated State Scenic Highways within the Project site and no officially designated State Scenic Highways in the City of Clovis. The nearest "eligible" State Scenic Highway to the City is SR 168, which is located over one mile to the south of the Project site at its closest point. The Master Plan area is not visible from this roadway segment. Furthermore, there are no "eligible" highway segments in the Project vicinity that may be included in the State Scenic Highway system. As such,

impacts to resources within a State Scenic Highway would be **less than significant**, and no mitigation is required.

Impact 3.1-3: Project implementation may result in light and glare impacts. (Less than Significant)

During the day, sunlight reflecting from structures is a primary source of glare, while nighttime light and glare can be divided into both stationary and mobile sources. Some types of stationary sources of nighttime light include structure illumination, interior lighting, decorative landscape lighting, and streetlights. The principal mobile source of nighttime light and glare would be from vehicle headlamp illumination.

The City's developed and inhabited land uses are the main source of daytime and nighttime light and glare, typified by single- and multi-family residences, commercial structures, industrial areas, and streetlights. These areas and the regular human activities within them, such as vehicular traffic, characterize the existing light and glare environment present during daytime and nighttime hours in these more developed and inhabited portions of the City.

The General Plan EIR (page 5.1-10) notes that there is a significant amount of ambient lighting that comes from surrounding communities and roadways. The City of Clovis is adjacent to highly urbanized portions of the City of Fresno to the west and south, and as such, ambient light in the community is substantially affected by land uses in Fresno. Large, light-intensive institutions and facilities near the City's boundary include Fresno Yosemite International Airport and California State University Fresno. Nevertheless, areas within the City limits and SOI, which account for nearly half of the entire Planning Area of the City of Clovis, include rural residential and agricultural lands which have very few sources of light and glare, allowing for clear day and nighttime views. The other half of the Planning Area of the City of Clovis is more densely developed, consisting of single- and multi-family residences, commercial structures, industrial areas, and streetlights typical of suburban communities.

The Project site is in the northern portion of Clovis, which is distant from the more developed and densely populated areas of downtown Fresno and Clovis. The Project site is best characterized as a mix of suburban and rural residential land uses. The Development Area is best characterized as undeveloped agricultural land, and the Non-Development Area is characterized as developed rural residential land. Areas immediately surrounding the Project site include rural residential land uses to the north and east, Big Dry Creek Reservoir to the east, and suburban land uses to the south and west.

The proposed Project consists of the expansion of the SOI to add approximately 952 acres into the City's SOI, including the approximately 507-acre Vista Ranch Master Plan and the 445-acre Non-Development Area. As described above, the Master Plan would include a mix of residential, commercial/mixed-uses, an elementary school, and parks, trails, and open space. The Non-Development Area includes approximately 445 acres that have not requested, nor would receive,

any entitlements other than to be included in the SOI expansion, and as such, no new development or improvements are proposed as part of this Project for the Non-Development Area.

The existing project site is not highly illuminated; however, surrounding uses provide sources of light from streetlights, car headlights traveling along adjacent roadways and from residential and other uses in the immediate vicinity. The existing light environment found in the vicinity of the Project site is considered typical of both suburban and rural residential areas. Existing suburban lighting exists along Shepherd Avenue, immediately south of the Project site. To the north of Shepherd Avenue in the Non-Development Area of the Project site is a mix of rural residential areas, which has less intensive lighting than what is common in the suburban neighborhoods in the vicinity. These existing rural residential areas abut the western boundary of the Master Plan Area. Immediately to the north and east of the Master Plan Area is vacant undeveloped land that has essentially no nighttime lighting.

These rural residential areas have typical residential building lighting (i.e., lights on the building structure in the front and backyard, landscaping lighting, and indoor lighting), similar to other suburban neighborhoods; however, there is a lower density of buildings. As such, overall lighting intensity is lower in these areas when compared to the surrounding suburban lighting. Additionally, some of the rural residential areas do not have streetlights, unlike other more intensively developed areas in the vicinity (i.e., neighborhoods south of Shepherd Avenue). However, these areas are typical of developed residential areas within and immediately outside the City of Clovis, where rural residential neighborhoods are often located adjacent to suburban or inhabited areas. The mix of lighting is typical of many suburban or inhabited neighborhoods along the periphery of the City.

The Project would introduce new sources of light and glare to the Project site, as it would convert the 507-acre Master Plan area from its relatively undeveloped existing use, which consists of a combination of fallow and grazing land, several rural residences, offices, a Contractor's Corp Yard, and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described above, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses.

New streets, sidewalks, pedestrian and bicycle amenities, a park and elementary school would be constructed within the Development Area. These facilities would result in the introduction of street lighting into a currently undeveloped site. However, the proposed uses and local roadways would be typical of what is already experienced because of the surrounding suburban community and local roadways that occur within the Project vicinity.

The Project site is located within a largely developed area of Fresno County, surrounded by developed land uses. Several existing light sources already affect residential areas and illuminate the night sky. In other words, sky glow is present under existing conditions, and the introduction of a residential development adjacent to those existing developments would not result in a significant increase in sky glow. While sky glow can increase based on certain intensive uses—such as a project that contemplates stadium lights, spotlights, and strobe lights, the proposed Project does not have

high intensity lights associated with any of these uses. There would be lighting associated with the proposed school and commercial areas; however, the lighting associated with these uses are not anticipated to include stadium lights, spotlights, or strobe lights, nor would they be of a lighting intensity anticipated to contribute to sky glow beyond the current baseline for the City of Clovis. As a result, any increase in sky glow resulting from the Project would be less than significant, and the Project would therefore not result in substantially increased sky glow.

The proposed Project also does not have any areas where there would be resulting light spillover or high intensity or excessively bright lights. Normal City standard streetlights would be present for safety purposes and would include standard shields installed to direct lighting to the roadway rights-of-way, without spilling over onto adjacent properties. Such new lighting would not result in a potentially significant impact. Other new sources of lighting would consist of lights on the building structures, in front and backyards, landscaping lighting, and indoor lighting. Although there would be new lighting associated with the residential buildings, the lighting attached to the building structures would be normal residential lighting subject to the City's standards. The installation of these lighting standards are part of the Project's design and would be designed to avoid nuisance light and spillover issues.

Some buildings within the Project would be two stories in height, and it is therefore possible that lighting from second story windows could be visible from adjacent properties; however, such second story indoor lighting would not be directed at, or to, the adjacent properties, and would not result in a potentially significant impact on adjacent properties. Additionally, as previously described, the proposed Project would not include any lights that would be considered excessively bright with the potential to create sky glow, such as stadium lights, strobe lights, spotlights, etc. In addition, there are no sources of significant glare associated with the proposed Project.

Although there are no specific lighting features associated with the proposed Project that would create unusual light and glare, light sources from the proposed Project can have an adverse impact on the surrounding areas, by introducing nuisance light into the area and decreasing the visibility of nighttime skies. Additionally, light sources can create light spillover impacts on surrounding land uses in the absence of a lighting plan that includes photometrics of the lighting. Any new lighting associated with implementation of the proposed Project would be consistent with the style and technical specifications approved by the City, including compliance with the City's light and glare regulations under Section 9.22.050 of the Clovis Development Code, which requires that light be shielded so that light does not spill onto adjacent properties. The City's existing requirements require a lighting plan to be submitted to the City for review and approval for the improvement plans, as well as for the building plans. All proposed outdoor lighting is required to meet applicable City standards regulating outdoor lighting, including 9.22.050 Exterior light and glare of the City's Development code, to minimize any impacts resulting from outdoor lighting on adjacent properties.

While implementation of regulations and standards within the Clovis Development Code would reduce impacts associated with increased light and glare, the impacts would not be eliminated entirely, and the overall level of light and glare in the Project site would increase in general as urban

development occurs. However, the introduction of new sources of illumination within the Master Plan area would be of a similar nature to the light levels of surrounding development and would not cause a significant change to the light environment in the vicinity.

New sources of glare from the proposed Project would occur primarily from the windshields of vehicles traveling to and from the Development Area and from vehicles parked within the Project site. Glare from traveling vehicles is a function of the density of vehicles on the roadway, the time that they are present, and the time of day. Generally, glare from traveling vehicles to a receptor is very short lived (fractions of a second) given that the glare is dependent on the amount of time in which the vehicle is positioned at the perfect angle for the sun to reflect light off the vehicle to a receptor. The potential for glare changes throughout the day as the angle of the sun changes. Furthermore, parking for the proposed residential uses in the Development Area would primarily occur within enclosed garages and driveways. Headlights and windshields would be shielded by the proposed residential structures within the site. There is always some potential for glare reflecting off of traveling vehicles, but the City does not consider glare from vehicles traveling along roadways as a significant impact. Construction materials associated with the Project implementation would not include glare-inducing materials. Additionally, the Project includes plans for extensive landscaping and open space areas throughout the site, which would provide visual screening and block potential windshield glare for sensitive receptors around and within the Project site. The Project will also be required to comply with the performance standards related to lighting and glare outlined in the General Plan and Development Code. Therefore, the proposed Project is not anticipated to have high concentrations of glare, and the impact from glare is less than significant.

Compliance with applicable City requirements standards would ensure that potential light and glare impacts remain **less than significant**, and no mitigation measures are required.

This Page Intentionally Left Blank.

This section provides an overview of agricultural resources in Fresno County and the City of Clovis, agricultural capability of the soils on the Project site, and existing site conditions. This section concludes with an evaluation of the impacts related to agricultural resources and recommendations for mitigating impacts as needed. Information in this section is derived primarily from:

- *City of Clovis General Plan* (City of Clovis, August 2014);
- Clovis *General Plan Draft Environmental Impact Report* (City of Clovis, June 2014);
- *California Important Farmlands Map* (California Department of Conservation, 2024);
- *California Land Conservation (Williamson) Act Status Report* (California Department of Conservation, 2022;
- *Fresno County 2022 Crop Report* (Fresno County Department of Agriculture, 2022);
- *Natural Resources Conservation Service* (NRCS) Web Soil Survey (NRCS, 2024);

It is noted that there are no forest resources located on the Project site or in the City of Clovis, thus this CEQA topic is not relevant to the proposed Project and will not be addressed further in this EIR.

There were no comments received during the Notice of Preparation scoping process related to this environmental topic.

3.2.1 ENVIRONMENTAL SETTING

FRESNO COUNTY AGRICULTURE

Fresno County occupies a central location in California's vast agricultural heartland, the San Joaquin Valley. The County's Agricultural Commissioner's most recent published Agricultural Report (2022) contains the following information relating to agriculture in the County.

Agricultural Value

The gross value of agricultural production in Fresno County for 2022 was $8.096 billion, which represents an increase from 2021. Table 3.2-1 lists the nine primary commodities in Fresno County from 2020 through 2022.

TABLE 3.2-1: SUMMARY COMPARISON OF CROP VALUES

PRODUCT TYPE	*2020 VALUE IN DOLLARS*	*2021 VALUE IN DOLLARS*	*2022 VALUE IN DOLLARS*
Field Crops	$299,961,000	$369,792,000	$373,438,000
Vegetable Crops	$1,418,639,000	$1,219,120,000	$1,240,819,000
Fruit and Nut Crops	$4,561,749,000	$4,793,849,000	$4,522,032,000
Nursery Products	$39,201,000	$47,941,000	$50,213,000
Livestock and Poultry	$1,022,018,000	$990,996,000	$1,058,256,000
Livestock and Poultry Products	$473,272,000	$500,528,000	$669,449,000
Seed Crops	$8,812,000	$24,151,000	$28,406,000
Apiary Products	$141,505,000	$133,585,000	$150,993,000
Other Products (Industrial Crops)	$3,243,000	$5,605,000	$1,940,000

SOURCE: FRESNO COUNTY 2022 CROP REPORT, 2022.

AGRICULTURAL CAPABILITY

The California Department of Conservation Farmland Mapping and Monitoring Program identifies lands that have agriculture value and maintains a statewide map of these lands called the Important Farmlands Inventory (IFI). IFI classifies land based upon the productive capabilities of the land, rather than the mere presence of ideal soil conditions.

The suitability of soils for agricultural use is just one factor for determining the productive capabilities of land. Suitability is determined based on many characteristics, including fertility, slope, texture, drainage, depth, and salt content. A variety of classification systems have been devised by the State to categorize soil capabilities. The two most widely used systems are the Capability Classification System and the Storie Index. The Capability Classification System classifies soils from Class I to Class VIII based on their ability to support agriculture with Class I being the highest quality soil. The Storie Index considers other factors such as slope and texture to arrive at a rating. The IFI is in part based upon both of these two classification systems.

Soil Capability Classification System

The Soil Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils that are unsuitable for agriculture. Generally, as the rating of the capability classification increases, yields and profits are more difficult to obtain. A general description of soil classifications, as defined by the NRCS is provided in Table 3.2-2 below.

TABLE 3.2-2: SOIL CAPABILITY CLASSIFICATION

CLASS	*DEFINITION*
I	Soils have slight limitations that restrict their use.
II	Soils have moderate limitations that restrict choice plants or that require moderate conservation practices.
III	Soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
IV	Soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
V	Soils are not likely to erode, but have other limitations; impractical to remove that limits their use largely to pasture or range, woodland, or wildlife habitat.
VI	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.
VIII	Soils and landforms have limitations that preclude their use for commercial plans and restrict their use to recreation, wildlife habitat, water supply, or aesthetic purposes.

SOURCE: USDA SOIL CONSERVATION SERVICE.

Storie Index Rating System

The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating) which have few or no limitations for agricultural production, to Grade 6 soils (less than 10) which are not suitable for agriculture. Under this system, soils deemed

less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in Table 3.2-3.

TABLE 3.2-3: STORIE INDEX RATING SYSTEM

GRADE	*INDEX RATING*	*DEFINITION*
1	80 – 100	Few limitations that restrict their use for crops
2	60 – 80	Suitable for most crops, but have minor limitations that narrow the choice of crops and have a few special management needs
3	40 – 60	Suited to a few crops or to special crops and require special management
4	20 – 40	If used for crops, severely limited and require special management
5	10 – 20	Not suited for cultivated crops, but can be used for pasture and range
6	Less than 10	Soil and land types generally not suited to farming

SOURCE: NRCS WEB SOIL SURVEY, 2019.

In addition to soil suitability, other factors for determining the agricultural value of land include whether soils are irrigated, the depth of soil, water-holding capacity, and physical and chemical characteristics. Areas considered to have the greatest agricultural potential are designated as Prime Farmland or Farmland of Statewide Importance.

Important Farmlands

The Farmland Mapping and Monitoring Program (FMMP) is a farmland classification system administered by the California Department of Conservation. Important farmland maps are based on the Land Inventory and Monitoring criteria, which classify a land's suitability for agricultural production based on both the physical and chemical characteristics of soils, and the actual land use. The system maps five categories of agricultural land, which include important farmlands (prime farmland, farmland of statewide importance, unique farmland, and farmland of local importance) and grazing land, as well as three categories of non-agricultural land, which include urban and built-up land, other land, and water area.

IMPORTANT FARMLANDS IN FRESNO COUNTY

Data from the Department of Conservation indicates that approximately 1,858 acres of Prime Farmland in the County were developed for other uses between 2016 and 2018, resulting in an existing total of 381,934 acres of Prime Farmland (42 percent of agricultural land)[1]. The remaining agricultural land is comprised of Farmland of Statewide Importance (9 percent), Unique Farmland (9 percent), Farmland of Local Importance (7 percent), and Grazing Land (14 percent). The types and acreages of farmland in 2016 and 2018 are shown in Table 3.2-4.

[1] Note: the 2026 to 2018 Conversion Report is the latest conversion report published by the Department of Conservation as of March 2024. https://www.conservation.ca.gov/dlrp/fmmp/Pages/2016-2018_Farmland_Conversion_Report.aspx

TABLE 3.2-4: FRESNO COUNTY FARMLANDS SUMMARY AND CHANGE BY LAND USE CATEGORY

LAND USE CATEGORY	2016-2018 ACREAGE CHANGES							
	TOTAL ACREAGE INVENTORIED				ACRES LOST	ACRES GAINED	TOTAL ACREAGE CHANGED	NET ACREAGE CHANGED
	2016		2018		(-)	(+)		
	Acres	Percent	Acres	Percent				
Prime Farmland	675,720	28%	672,208	28%	7,237	3,725	10,962	-3,512
Farmland of Statewide Importance	397,133	16%	395,148	16%	3,945	1,960	5,905	-1,985
Unique Farmland	94,902	4%	95,352	4%	809	1,259	2,068	450
Farmland of Local Importance	191,783	8%	192,434	8%	9,946	10,597	20,543	651
IMPORTANT FARMLAND SUBTOTAL	1,359,538	56%	1,355,142	56%	**21,937**	**17,541**	**39,478**	**-4,396**
Grazing Land	822,696	34%	822,455	34%	718	477	1,195	-241
AGRICULTURAL LAND SUBTOTAL	2,182,234	90%	2,177,597	89%	**22,655**	**18,018**	**40,673**	**-4,637**
Urban and Built-up Land	128,910	5%	132,868	5%	685	4,643	5,328	3,958
Other Land	121,445	5%	121,847	5%	1,745	2,211	3,956	466
Water Area	4,908	<1%	5,121	<1%	64	277	341	213
TOTAL AREA INVENTORIED	**2,437,497**	**100%**	**2,437,433**	**100%**	**25,149**	**25,149**	**50,298**	**0**

SOURCE: CA DEPARTMENT OF CONSERVATION, DIVISION OF LAND RESOURCE PROTECTION TABLE A-30, 2018.

EXISTING SITE CONDITIONS

The Project site is located within a flat to gently sloping terrain situated at an elevational range of approximately 390 to 416 feet above mean sea level in the agriculturally rich San Joaquin Valley. The Project site is primarily undeveloped and consists of annual grassland, fallow farmland, or pasture, and developed or disturbed areas that consist of a rural residence, farm buildings, abandoned poultry pens, and abandoned nursery operations. The offsite infrastructure portions of the Study Area are located along developed roads fronting rural residential development on East Behymer Avenue, East Perrin Avenue, East Shepherd Avenue, and North Fowler Avenue.

Within the Project site, the Master Plan Area primarily serves as vacant grazing land while the Non-development Areas are primarily rural residential land. Buried structures may be present in the Master Plan Area, including utility lines, irrigation lines, drainage lines, septic systems and possible water wells. Each individual property within the Development Areas will require the appropriate decommissioning of the existing underground utilities prior to development. This will include abandonment of existing wells in accordance with a permit issued by Fresno County.

Surrounding Land Uses

The Project site is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land, and open space land uses. Uses immediately east of the Project site consist of the Big Dry Creek Reservoir and an existing earthen dam, owned and operated by the Fresno Metropolitan Flood Control District. Uses immediately south of the Project site are primarily single-

family residential. Uses immediately west and north of the Project site are primarily rural residential on larger lots and fallow or grazing properties.

Project Site Farmland Characteristics

The State of California Department of Conservation FMMP and Fresno County GIS data were used to illustrate the farmland designations for the Project site. The last mapping date in Fresno County was June 2020. Farmlands on the Project site are identified in Figure 3.2-1. The farmland classifications for the site and surrounding area are described below. It is important to note that the California Department of Conservation notes on the map that "*This map should be used within the limits of its purpose - as a current inventory of agricultural land resources. This map does not necessarily reflect general plan or zoning designations, city limit lines, changing economic or market conditions, or other factors which may be taken into consideration when land use policies are determined. This map is not designed for parcel-specific planning purposes due to its scale and the ten-acre minimum land use mapping unit. Classification of important farmland and urban areas on this map is based on best available data. The information has been delineated as accurately as possible at 1:24,000-scale, but no claim to meet 1:24,000 National Map Accuracy Standards is made due to variations in the quality of source data*." Table 3.2-5 provides a breakdown of the Important Farmlands within the Master Plan Area, as well as those areas outside but within the Project site.

TABLE 3.2-5: IMPORTANT FARMLAND

Farmland Types	*Non-Dev Area*	*MPArea 1*	*MPArea 2*	*Master Plan Area*	*ROW*	*Grand Total*
Urban and Built-Up Land	66.92	0.00	0.00	0.00	1.90	68.82
Farmland of Local Importance	143.35	338.10	138.14	476.24	2.83	622.42
Rural Residential Land	210.90	0.00	0.00	0.00	0.00	210.90
Semi-agricultural and Rural Commercial Land	0.00	8.45	0.05	8.50	0.85	9.35
Vacant or Disturbed Land	24.49	15.50	0.52	16.02	0.00	40.51
Grand Total	**445.66**	**362.05**	**138.71**	**500.76**	**5.58**	**952.01**

SOURCE: CA DEPARTMENT OF CONSERVATION, IMPORTANT FARMLANDS, 2024.

PRIME FARMLAND

Prime Farmland is farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

This category is not located within the Project site.

FARMLAND OF STATEWIDE IMPORTANCE

Farmland of Statewide Importance is farmland with characteristics similar to those of Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

This category is not located within the Project site.

UNIQUE FARMLAND

Unique Farmland is farmland of lesser quality soils used for the production of the California's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

This category is not located within the Project site.

FARMLAND OF LOCAL IMPORTANCE

Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.

Approximately 476.24 acres of Farmland of Local Importance is in the Master Plan Area, with 143.35 acres in the Non-Development Area.

URBAN AND BUILT-UP LAND

Urban and Built-up Land is land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a ten-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

This category is not located within the Master Plan Area. Approximately 66.92 acres are in the Non-Development Area.

RURAL RESIDENTIAL LAND

Rural Residential Land has a building density of less than one structure per 1.5 acres, but with at least one structure per ten acres.

This category is not located within the Master Plan Area. Approximately 210.9 acres are in the Non-Development Area.

OTHER LAND

Other Land is not included in any other mapping category. Common examples include brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or

aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. This category also includes Rural Land, which includes: Semi-Agricultural and Rural Commercial Land, Vacant or Disturbed Land, Confined Animal Agriculture, and Nonagricultural or Natural Vegetation.

There are 8.5 acres of "Semi-agricultural and Rural Commercial Land" in the Master Plan Area and 16.02 acres of "Vacant or Disturbed Land" in the Master Plan Area and 24.49 acres of "Vacant or Disturbed Land" in the Non-Development Area.

Soils and Farmland Characteristics

A Custom Soil Survey was completed for the Project site using the NRCS Web Soil Survey program. Table 3.2-6 identifies the soils found in the Project site. The NRCS Soils Map is provided on Figure 3.2-2.

TABLE 3.2-6: PROJECT SITE SOILS

MAP UNIT SYMBOL	*NAME*	*ACRES IN MASTER PLAN AREA*	*PERCENT OF MASTER PLAN AREA*	*CAPABILITY CLASSIFICATION*	*STORIE INDEX*
AoA	Alamo clay	8.63	1.70%	4s	70
AoB	Atwater loamy sand, 0 to 3 percent slopes, MLRA 17	19.58	3.86%	4e	65
ArA	Atwater loamy sand, 3 to 9 percent slopes	107.95	21.31%	4s	88
ArB	Atwater sandy loam, 0 to 3 percent slopes	12.09	2.39%	4e	81
AtA	Atwater sandy loam, 3 to 9 percent slopes	32.64	6.44%	4s	65
BcC	Atwater sandy loam, moderately deep, 0 to 3 percent slopes	34.87	6.88%	3e	51
CzcB	Blasingame loam, 3 to 15 percent slopes	0.67	0.13%	4e	30
DhB	Cometa-San Joaquin sandy loams, 3 to 9 percent slopes	2.62	0.52%	4e	68
Dn	Delhi loamy sand, 3 to 9 percent slopes	3.70	0.73%	4w	65
Fn	Dello sandy loam	34.57	6.82%	4s	90
Gf	Foster loam	25.47	5.03%	4w	80
Gn	Grangeville fine sandy loam, 0 to 1 percent slopes, MLRA 17	7.20	1.42%	4s	63
GtA	Grangeville fine sandy loam, hard substratum	5.90	1.17%	4c	90
Hu	Greenfield sandy loam, 0 to 3 percent slopes	3.04	0.60%	3w	36
MoD	Hildreth clay	2.81	0.55%	7e	16
Ra	Los Robles loam, 0 to 3 percent slopes	35.86	7.08%	4c	77

Rb	Millerton rocky fine sandy loam, 3 to 30 percent slopes	0.75	0.15%	4s	62
Rc	Ramona loam	1.03	0.20%	4c	85
Re	Ramona loam, hard substratum	2.90	0.57%	4s	65
Rh	Ramona sandy loam	18.57	3.67%	N/A	5
ScA	Ramona sandy loam, hard substratum	14.60	2.88%	4s	24
SeA	Riverwash	113.00	22.30%	4s	33
SgA	San Joaquin loam, 0 to 3 percent slopes	1.40	0.28%	4s	24
TzbA	San Joaquin loam, shallow, 0 to 3 percent slopes	16.86	3.33%	4s	76

SOURCE: FRESNO COUNTY GIS, NRCS SOILS DATABASE, 2024.

Availability of Water Resources and Feasibility

The Master Plan Area is not irrigated for crop production. The Master Plan Area is best characterized as grazing and fallow land.

3.2.2 REGULATORY SETTING

FEDERAL

Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) is intended to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It ensures that, to the extent practicable, federal programs are compatible with State and local units of government as well as private programs and policies to protect farmland. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of the FPPA, farmland includes Prime Farmland, Unique Farmland, and Land of Statewide or Local Importance. Farmland subject to FPPA requirements does not have to be currently used for crop production. In fact, the land can be forest land, pastureland, cropland, or other land, but does not include water bodies or land developed for urban land uses (i.e., residential, commercial, or industrial uses).

NRCS administers the Farmland Protection Program. NRCS uses a land evaluation and site assessment (LESA) system to establish a farmland conversion impact rating score on proposed sites of federally funded and assisted projects. This score is used as an indicator for the project sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level. The assessment is completed on form AD-1006, Farmland Conversion Impact Rating. The sponsoring agency completes the site assessment portion of the AD-1006, which assesses non-soil related criteria such as the potential for impact on the local agricultural economy if the land is converted to non-farm use and compatibility with existing agricultural use.

The Project site and adjacent parcels will not be completed by a federal agency, or with assistance from a federal agency. Therefore, the Project will not be subject to the FPPA.

STATE

Williamson Act

The California Land Conservation Act of 1965, commonly known as the Williamson Act, was established based on numerous State legislative findings regarding the importance of agricultural lands in an urbanizing society. Policies emanating from those findings include those that discourage premature and unnecessary conversion of agricultural land to urban uses and discourage discontinuous urban development patterns, which unnecessarily increase the costs of community services to community residents.

The Williamson Act authorizes each County to establish an agricultural preserve. Land that is within the agricultural preserve is eligible to be placed under a contract between the property owner and County that would restrict the use of the land to agriculture in exchange for a tax assessment that is based on the yearly production yield. The contracts have a 10-year term that is automatically renewed each year, unless the property owner requests a non-renewal or the contract is cancelled. If the contract is cancelled, the property owner is assessed a fee of up to 12.5 percent of the property value.

The Project site has three parcels under a Williamson Act contract, however, one is located in the Non-development Area and the other two are located in MPArea 2 which is not anticipated for immediately development. It is anticipated that a standard cancellation would ensure that there is no conflict with the Williamson Act. Figure 3.2-3 shows Williamson Act contract land within the vicinity of the Project Site.

Farmland Security Zones

In 1998, the State legislature established the Farmland Security Zone (FSZ) program. FSZs are similar to Williamson Act contracts, in that the intention is to protect farmland from conversion. The main difference however, is that the FSZ must be designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. The term of the contract is a minimum of 20 years. The property owners are offered an incentive of greater property tax reductions when compared to the Williamson Act contract tax incentives; the incentives were developed to encourage conservation of prime farmland through FSZs. The non-renewal and cancellation procedures are similar to those for Williamson Act contracts.

The Project site and the adjacent parcels are not within the FSZ program.

California Government Code Section 56064

This section of the Government Codes defines "Prime agricultural land" as follows:

- Prime agricultural land means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:
    - Land that qualifies, if irrigated, for rating as Class I or Class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.
    - Land that qualifies for rating 80 through 100 Storie Index Rating.
    - Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.
    - Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will re-turn during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre.
    - Land that has returned from the production of unprocessed agricultural plant products on an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years.

LOCAL

Local Agency Formation Commission Boundary Controls

The Fresno Local Agency Formation Commission (LAFCo) is responsible for coordinating orderly amendments to local jurisdictional boundaries, including annexations. Annexation of the Master Plan into the City of Clovis would be subject to LAFCo approval, and LAFCo's decision is governed by state law (Gov't Code § 56001 et seq.) and the local LAFCo Policies and Procedures. State law requires LAFCo to consider agricultural land and open space preservation in all decisions related to expansion of urban development. LAFCO's definition of Prime Agriculture land refers to California Government Code Section 56064, which is described above.

City of Clovis General Plan

The General Plan includes several policies relevant to agricultural resources. Policies applicable to the Project are identified below:

Policies: Land Use Element

- LU-Policy 4.4. Farmland Conservation. Participate in regional farmland conservation, including the establishment of comprehensive agricultural preserves or easements, through

efforts such as the Fresno County Model Farmland Conservation Program or the San Joaquin Valley Greenprint.

- LU-Policy 6.2. Smart growth. The city is committed to the following smart growth goals.

    a. Create a range of housing opportunities and choices;
    b. Create walkable neighborhoods;
    c. Encourage community and stakeholder collaboration;
    d. Foster distinctive, attractive communities with a strong sense of place;
    e. Make development decisions predictable, fair, and cost-effective;
    f. Mix land uses;
    g. Preserve open space, farmland, natural beauty, and critical environmental areas;
    h. Provide a variety of transportation choices;
    i. Strengthen and direct development toward existing communities;
    j. Take advantage of compact building design;
    k. Enhance the economic vitality of the region;
    l. Support actions that encourage environmental resource management.

Policies: Open Space and Conservation Element

- OSC-Policy 2.2. New development. Encourage new development to incorporate on-site natural resources and low impact development techniques.

- OSC-Policy 2.4. Agricultural lands. Preserve the city's agricultural legacy through the Agricultural land use designation, memorialize agricultural history and culture, and facilitate thoughtful conversion of lands to development.

- OSC-Policy 2.5. Right to farm. Support, encourage, and protect agricultural operations within Clovis and recognize their right to farm.

City of Clovis Right to Farm Ordinance

Section 9.40.170 of the Municipal Code establishes the City's "Right to Farm" ordinance, which is intended to provide the City's policy regarding the "right to farm" and contains a subdivider's and owner's disclosure statement, which acknowledges the subdivider's and owner's understanding of the presence of the adjoining agricultural use and the City's policy regarding its right to continue. The ordinance establishes the City's policy to agricultural land consistent with the California Civil Code Section 3482.5 as follows:

A. Policy of the City.
    1. It is the declared policy of the City of Clovis to preserve, protect, and encourage development of its agricultural land consistent with the California Civil Code Section 3482.5, which provides that no agricultural activity, operation, or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after it has been in operation for more than three (3) years if it was not a nuisance at the time it began.

2. This policy applies to normally acceptable agricultural operations, as defined in the California Civil Code Section 3482.5, and shall not apply if the agricultural activity, operation, facility, or appurtenances thereof obstruct the free passage or use, in the customary manner, of any public park, square, street, or highway.
3. This policy shall not invalidate any provision contained in the Fish and Game Code, Food and Agricultural Code, Health and Safety Code, or Water Code Division 7 (commencing with Section 13000), if the agricultural activity, operation, facility, or appurtenances thereof constitute a nuisance, public or private, as specifically defined or described in any of those provisions.

B. Covenant. If a subdivision is at any point within three hundred feet (300') of land zoned for agricultural uses, the approval of the tentative and final subdivision map or parcel map shall be conditional upon the recordation with the County Recorder of a right-to-farm covenant acknowledging, accepting and complying with this section, in substantially the following wording or similar form:

The undersigned in consideration of recordation of said subdivision by the City of Clovis, do hereby covenant and agree with the declared policy of the City of Clovis (Right-to-Farm Ordinance) to preserve, protect, and encourage development of its agricultural land consistent with the California Civil Code Section 3482.5, which provides that no agricultural activity, operation, or facility, or appurtenances thereof, as defined in the code, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after it has been in operation for more than three years if it was not a nuisance at the time it began; that the described property is in or near agricultural districts and that the residents of the property should be prepared to accept the inconveniences and discomfort associated with normal farm activities. This covenant shall run with the land and be binding upon all future owners, heirs, successors, and assigns to the property.

(§ 2, Ord. 14-13, eff. October 8, 2014; § 1(2) (Atts. 1, 2), Ord. 20-18, eff. February 3, 2021. Formerly 9.40.180)

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on agricultural and forest resources if it will:

- 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;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public

Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined in by Government Code section 51104 (g));

- Result in the loss of forest land or conversion of forest land to non-forest use; or
- 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.

There are no forest lands or timber lands located within the Clovis Planning Area. There are also no parcels that are currently zoned as forest land, timber, or timber production. Therefore, implementation of the proposed Project would have no impact on forest land, timber, or timber production and this impact will not be discussed further.

METHODOLOGY

Land Evaluation and Site Assessment

The California LESA Model was utilized in the impact analysis shown below. The formulation of the LESA Model is the result of Senate Bill 850 (Chapter 812 /1993), which charged the California Natural Resources Agency, in consultation with the Governor's Office of Planning and Research, with developing an amendment to Appendix G of the CEQA Guidelines concerning agricultural lands. Such an amendment is intended "to provide lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process" (Public Resources Code Section 21095).

The California Agricultural LESA Model is composed of six different factors. Two Land Evaluation factors are based upon measures of soil resource quality. Four Site Assessment factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, each of these factors is separately rated on a 100-point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project's impact based on the scoring thresholds of significance.

IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: The proposed Project has the potential to result in the conversion of Farmlands, including Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses. (Less than Significant)

Development of the proposed Project would result in the permanent conversion of approximately 476.24 acres of Farmland of Local Importance, as designated by the California Department of Conservation on the Important Farmlands Finder (2024)[2] and as shown on Figure 3.2-1, to nonagricultural use. However, it is important to consider that the California Department of Conservation includes the following note on their map: "*This map should be used within the limits of its purpose - as a current inventory of agricultural land resources. This map does not necessarily reflect general plan or zoning designations, city limit lines, changing economic or market conditions, or other factors which may be taken into consideration when land use policies are determined. This map is not designed for parcel-specific planning purposes due to its scale and the ten-acre minimum land use mapping unit. Classification of important farmland and urban areas on this map is based on best available data. The information has been delineated as accurately as possible at 1:24,000-scale, but no claim to meet 1:24,000 National Map Accuracy Standards is made due to variations in the quality of source data*." After looking at site-specific characteristics more closely for the Project site, it is noteworthy that the Department of Conservation's designations do not accurately and fully consider site specific characteristics such as the lack of any irrigation or crop production on the Project site. To reconcile these facts and analyze the site-specific characteristics more fully, the Clovis General Plan calls for the use of the Land Evaluation and Site Assessment (LESA) to evaluate the significance of the agricultural conversion. It is noted that the LESA model was developed by the Department of Conservation, which is the same agency that published the Important Farmland's Map.

The California LESA model was utilized to determine the proposed Project's potential impact on agricultural resources. The LESA scoring for the proposed Project is documented on the LESA scoring sheets in Appendix B. The proposed Project has a final LESA score of 40.44, which is a significant impact only if the LESA sub scores are both greater than or equal to 20 points. The proposed Project has a sub score of 25.44 for the Land Evaluation and a sub score of 15 for the Site Assessment, which means the conversion of the land on the Project site is not considered significant according to the California Department of Conservation's established thresholds.

After evaluating the site-specific soil characteristics, project size, surrounding uses, agricultural protection zones, water resources availability, and ongoing economic feasibility of agricultural operations utilizing the LESA Model, it was determined that the conversion of the land on the Project

[2] https://maps.conservation.ca.gov/dlrp/ciff/

site is not a significant impact. Therefore, implementation of the proposed Project would have a **less than significant** impact relative to this topic and no mitigation is required.

Impact 3.2-2: The proposed Project has the potential to conflict with existing zoning for agricultural use, or Williamson Act Contracts (Less than Significant with Mitigation)

There is one parcel within the Non-development area under a Williamson Act contract. This parcel is not anticipated for any development and no conflict would occur from project approval.

There are two parcels within the Master Plan Area with an active Williamson Act contract. The parcels are located within Planning Area (PA) 29. These parcels total 34.17 acres and are part of MPArea 2, which is not anticipated for immediate development. MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan, but these areas would be required to have a project-level CEQA analysis when the property owners decide to develop the parcels. Immediate development would have the potential for a conflict because the Williamson Act contract is in effect, however, immediate development is not anticipated for the parcels under a Williamson Act. A Williamson Act contract is a voluntary agreement and a cancellation process is defined in *Williamson Act Cancellation Process, Guide for Local Governments* (California Department of Conservation 2022). The process can involve a filing of non-renewal and a lapse of the appropriate time, or a standard cancellation with a fee assessment.

Under the Fresno County General Plan, the Master Plan Area is designated mostly for Low Density Residential, with Rural Residential designations along the western portion. The Non-Development Area is designated for Rural Residential. Any new development would be done after annexation from the County into the City limits, which would shift any land use and zoning decisions to the City of Clovis. The Fresno Local Agency Formation Commission (LAFCo) will require any land that is annexed into the City limits to be pre-zoned by the City of Clovis in conjunction with the proposed annexation.

The proposed land use designation is MU-V: Mixed Use Village and the pre-zoning is varied by Planning Area and is defined in Section 2.0 Project Description. The Non-Development Area would not receive a pre-zone since it is not proposed for annexation. Any pre-zoning approved by the City would go into effect upon annexation approval by LAFCo.

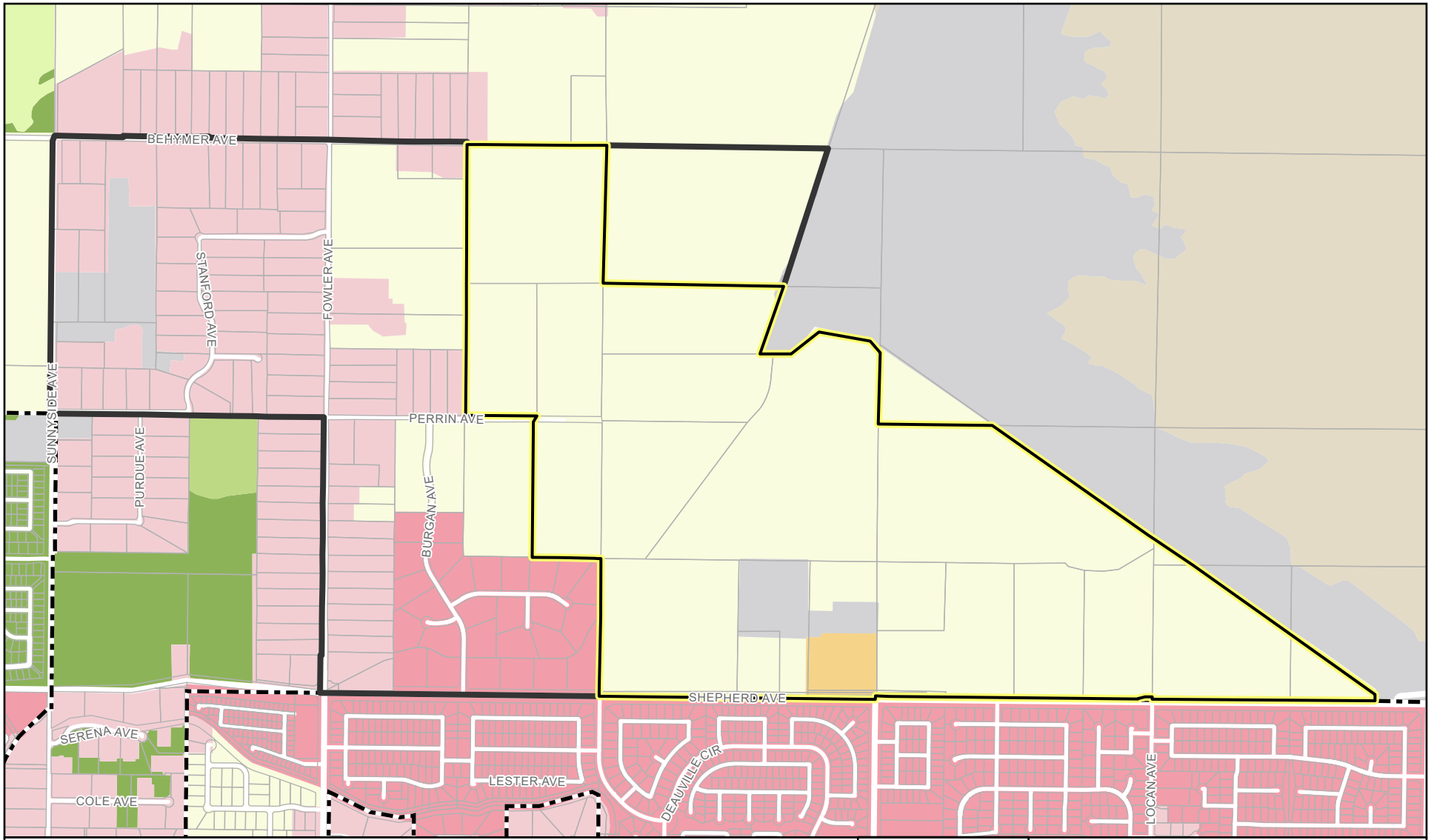
The proposed pre-zoning is consistent with the proposed residential uses. Additionally, conversion of the Project site from its current vacant and grazing uses to urban uses has been anticipated by the City under the adopted General Plan. Therefore, development of the proposed Project would not have any impact beyond what was already anticipated in the General Plan EIR. The following mitigation would ensure that there is no conflict with a Williamson Act contract, as it would require future development to demonstrate that there is not an active Williamson Act contract encumbering the subject property. Implementation of the proposed Project would have a **less than significant** impact relative to this topic with mitigation.

MITIGATION MEASURE(S)

Mitigation Measure 3.2-1*: The Project applicant for any development within the Master Plan Area shall provide the City with evidence that there is not an active Williamson Act contract encumbering their property. The property owner of Planning Area (PA) 29 shall adhere to the "Williamson Act Cancellation Process, Guide for Local Governments (California Department of Conservation 2022) to ensure that the appropriate approvals are received prior to any development.*

Impact 3.2-3: The proposed Project has the potential to result in conflicts with adjacent agricultural lands or indirectly cause conversion of agricultural lands (Less than Significant)

The City's General Plan anticipates that some agricultural lands within the City's Planning Area would ultimately develop with urban uses. Nevertheless, the City has a Right to Farm Ordinance that is intended to reduce the occurrence of any conflict between nonagricultural and agricultural land uses within the City through requiring the transferor of any property in the City to provide a disclosure statement describing that the City permits agricultural operations, including those that utilize chemical fertilizers and pesticides. Development of the proposed Project would have a **less than significant** impact relative to this topic and no mitigation is required.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits
- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Grazing Land
- Farmland of Local Importance
- Vacant or Disturbed Land
- Rural Residential Land
- Semi-agricultural and Rural Commercial Land
- Urban and Built-Up Land

N

0 500 1,000

US Feet

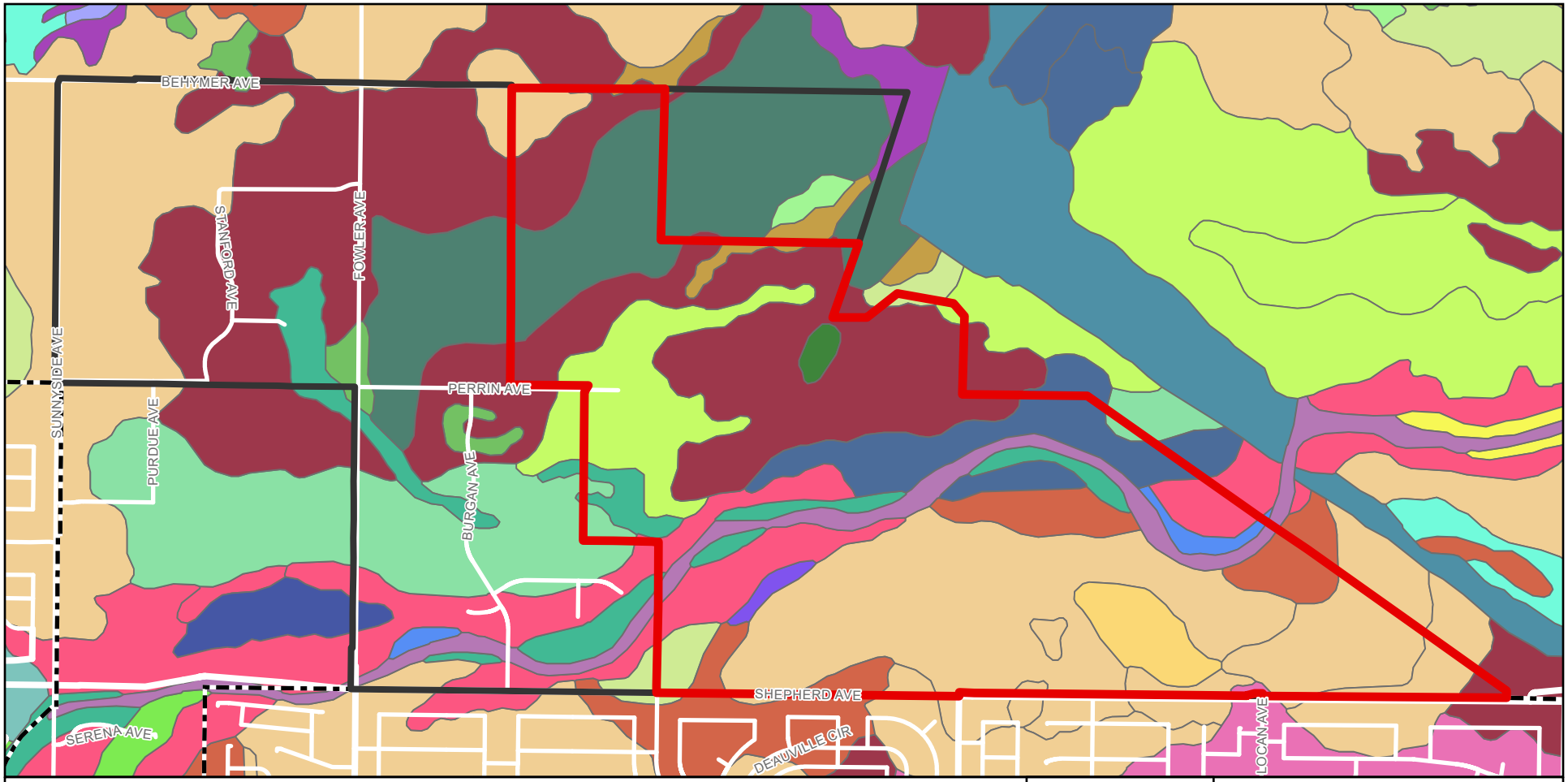
Sources: FMMP 2020; Fresno County GIS. Map date: June 7, 2024.

SOI Expansion Vista Ranch

Figure 3.2-1: Important Farmland Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND

- Clovis City Limits
- SOI Expansion Area
- Master Plan Area
- Alamo clay
- Atwater loamy sand
- Atwater sandy loam
- Blasingame loam
- Cometa sandy loam
- Cometa-San Joaquin sandy loams
- Delhi loamy sand
- Dello loamy sand
- Dello sandy loam
- Foster loam
- Grangeville fine sandy loam
- Greenfield sandy loam
- Hanford coarse sandy loam
- Hanford sandy loam
- Hildreth clay
- Los Robles clay loam
- Los Robles loam
- Millerton rocky fine sandy loam
- Pits
- Ramona loam
- Ramona sandy loam
- Riverwash
- San Joaquin loam
- San Joaquin sandy loam
- Tujunga loamy sand
- Visalia sandy loam
- Water
- Yokohl loam

N

0 500 1,000

US Feet

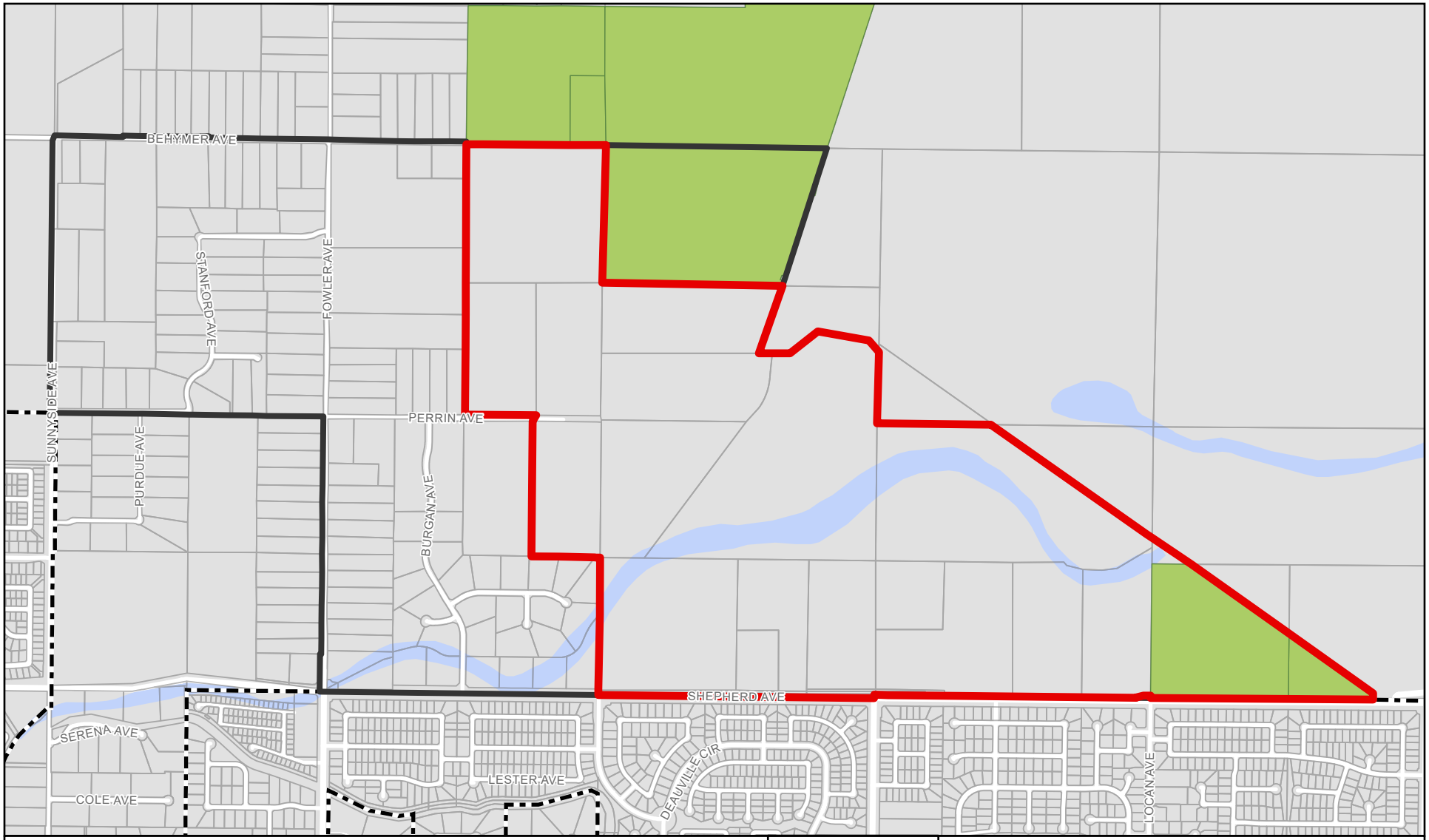
Sources: NRCS Soil Survey; Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 3.2-2. Soil Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits
- Williamson Act Parcels

Sources: Fresno County GIS. Map date: January 26, 2024.

N

0 500 1,000

US Feet

SOI Expansion Vista Ranch

Figure 3.2-3. Williamson Act Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from Project implementation. The analysis contained in this section is intended to be at a project-level, and covers impacts associated with the conversion of the entire Master Plan site to urban uses. Following this discussion is an assessment of consistency of the proposed Project with applicable policies and local plans. The Greenhouse Gases and Climate Change analysis is in a separate section of this document. This section is based in part on the following technical studies: *Air Quality and Land Use Handbook: A Community Health Perspective* (California Air Resources Board [CARB], 2007), *Guide for Assessing and Mitigation Air Quality Impacts* (San Joaquin Valley Air Pollution Control District [SJAVPCD], 2002), and *Guidance for Assessing and Mitigating Air Quality Impacts - 2015* (SJAVPCD, 2015). The section also includes the model results from the California Emissions Estimator Model (CalEEMod v. 2022.1).

There were two comments received during the Notice of Preparation (NOP) comment period regarding air quality. The comments were provided from the San Joaquin Valley Air Pollution Control District (November 13, 2023, and March 5, 2024). All comments are included in Appendix A.

3.3.1 ENVIRONMENTAL SETTING

SAN JOAQUIN VALLEY AIR BASIN

The City of Clovis (City) is in the central portion of the San Joaquin Air Basin (SJVAB). The SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Tulare, Madera, Merced, San Joaquin, and Stanislaus. Air pollution from significant activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

The SJVAB is approximately 250 miles long and an average of 35 miles wide. It is bordered by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi Mountains in the south. There is a slight downward elevation gradient from Bakersfield in the southeast end (elevation 408 feet) to sea level at the northwest end where the valley opens to the San Francisco Bay at the Carquinez Straits. At its northern end is the Sacramento Valley, which comprises the northern half of California's Central Valley. The bowl-shaped topography inhibits movement of pollutants out of the valley (San Joaquin Valley Air Pollution Control District (SJVAPCD), 2015).

Climate

The SJVAB is in a Mediterranean climate zone and is influenced by a subtropical high-pressure cell most of the year. Mediterranean climates are characterized by sparse rainfall, which occurs mainly in winter. Summers are hot and dry. Summertime maximum temperatures often exceed 100°F in the valley.

The subtropical high-pressure cell is strongest during spring, summer, and fall and produces subsiding air, which can result in temperature inversions in the valley. A temperature inversion can

act like a lid, inhibiting vertical mixing of the air mass at the surface. Any emissions of pollutants can be trapped below the inversion. Most of the surrounding mountains are above the normal height of summer inversions (1,500 to 3,000 feet).

Winter-time high pressure events can often last many weeks, with surface temperatures often lowering into the 30°F. During these events, fog can be present and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few hundred feet (SJVAPCD, 2015).

Wind Patterns

Wind speed and direction play an important role in dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing and transporting it to other locations.

Especially in summer, winds in the San Joaquin Valley most frequently blow from the northwest. The region's topographic features restrict air movement and channel the air mass towards the southeastern end of the valley. Marine air can flow into the basin from the San Joaquin River Delta and over Altamont Pass and Pacheco Pass, where it can flow along the axis of the valley, over the Tehachapi Pass, into the Southeast Desert Air Basin. This wind pattern contributes to transporting pollutants from the Sacramento Valley and the Bay Area into the SJVAB. Approximately 27 percent of the total emissions in the northern portion, 11 percent of total emissions in the central region, and 7 percent of total emission in the south valley of the SJVAB are attributed to air pollution transported from these two areas.[1] The Coastal Range is a barrier to air movement to the west and the high Sierra Nevada Range is a significant barrier to the east (the highest peaks in the southern Sierra Nevada reach almost halfway through the Earth's atmosphere). Many days in the winter are marked by stagnation events where winds are very weak. Transport of pollutants during winter can be very limited. A secondary but significant summer wind pattern is from the southeast and can be associated with nighttime drainage winds, prefrontal conditions, and summer monsoons.

Two significant diurnal wind cycles that occur frequently in the valley are the sea breeze and mountain-valley upslope and drainage flows. The sea breeze can accentuate the northwest wind flow, especially on summer afternoons. Nighttime drainage flows can accentuate the southeast movement of air down the valley. In the mountains during periods of weak synoptic scale winds, winds tend to be upslope during the day and downslope at night. Nighttime and drainage flows are especially pronounced during the winter when flow from the easterly direction is enhanced by nighttime cooling in the Sierra Nevada. Eddies can form in the valley wind flow and can recirculate a polluted air mass for an extended period.

Temperature

Solar radiation and temperature are particularly important in the chemistry of ozone formation. The SJVAB averages over 260 sunny days per year. Photochemical air pollution (primarily ozone) is

[1] SJVAPCD. Frequently Asked Questions, http://www.valleyair.org/general_info/frequently_asked_questions.htm#What%20is%20being%20done%20to%20improve%20ai r%20quality%20in%20the%20San%20Joaquin%20Valley, accessed June 10, 2024.

produced by the atmospheric reaction of organic substances (such as volatile organic compounds) and nitrogen dioxide under the influence of sunlight. Ozone concentrations are very dependent on the amount of solar radiation, especially during late spring, summer, and early fall. Ozone levels typically peak in the afternoon. After the sun goes down, the chemical reaction between nitrous oxide and ozone begins to dominate. This reaction tends to scavenge and remove the ozone in the metropolitan areas through the early morning hours, resulting in the lowest ozone levels, possibly reaching zero at sunrise in areas with high nitrogen oxides emissions. At sunrise, nitrogen oxides tend to peak, partly due to low levels of ozone currently and due to the morning commuter vehicle emissions of nitrogen oxides.

Generally, the higher the temperature, the more ozone formed, since reaction rates increase with temperature. However, extremely hot temperatures can "lift" or "break" the inversion layer. Typically, if the inversion layer does not lift to allow the buildup of contaminants to be dispersed, the ozone levels will peak in the late afternoon. If the inversion layer breaks and the resultant afternoon winds occur, the ozone will peak in the early afternoon and decrease in the late afternoon as the contaminants are dispersed or transported out of the SJVAB.

Ozone levels are low during winter periods when there is much less sunlight to drive the photochemical reaction (SJVAPCD, 2015).

Precipitation, Humidity, and Fog

Precipitation and fog may reduce or limit some pollutant concentrations. Ozone needs sunlight for its formation, and clouds and fog can block the required solar radiation. Wet fogs can cleanse the air during winter as moisture collects on particles and deposits them on the ground. Atmospheric moisture can also increase pollution levels. In fogs with less water content, the moisture acts to form secondary ammonium nitrate particulate matter. This ammonium nitrate is part of the valley's $PM_{2.5}$ and PM_{10} problem. The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the SJVAB floor. This creates strong low-level temperature inversions and very stable air conditions, which can lead to tule fog. Wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of $PM_{2.5}$ and PM_{10} (SJVAPCD, 2015).

Inversions

The vertical dispersion of air pollutants in the San Joaquin Valley can be limited by persistent temperature inversions. Air temperature in the lowest layer of the atmosphere typically decreases with altitude. A reversal of this atmospheric state, where the air temperature increases with height, is termed an inversion. The height of the base of the inversion is known as the "mixing height." This is the level to which pollutants can mix vertically. Mixing of air is minimized above and below the inversion base. The inversion base represents an abrupt density change where little air movement occurs.

Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on

the summer days are usually 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor (SJVAPCD, 2015).

CRITERIA POLLUTANTS

All criteria pollutants can have human health and environmental effects at certain concentrations. The United States Environmental Protection Agency (U.S. EPA) uses six "criteria pollutants" as indicators of air quality and has established, for each of them, a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). In addition, California establishes ambient air quality standards, called California Ambient Air Quality Standards (CAAQS). California law does not require that the CAAQS be met by a specified date as is the case with NAAQS.

The ambient air quality standards for the six criteria pollutants (as shown in Table 3.3-1) are set to public health and the environment within an adequate margin of safety (as provided under Section 109 of the Federal Clean Air Act). Epidemiological, controlled human exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants, and form the scientific basis for new and revised ambient air quality standards. Principal characteristics and possible health and environmental effects from exposure to the six primary criteria pollutants generated by the Project are discussed below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While O_3 in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O_3 at ground level are a major health and environmental concern. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O_3 levels occur typically during the warmer times of the year. Both ROGs and NO_x are emitted by transportation and industrial sources. ROGs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents. Relatedly, reactive organic compounds (ROG) are defined as the subset of ROGs that are reactive enough to contribute substantially to atmospheric photochemistry.

The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function, and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths (U.S. EPA, 2019a). The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e.,

breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggest that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 parts per billion (U.S. EPA, 2019b). The average background level of ozone in California and Nevada is approximately 48.3 parts per billion, which represents approximately 77 percent of the total ozone in the western region of the U.S. (NASA, 2015).

In addition to human health effect, ozone has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. O_3 can also act as a corrosive and oxidant, resulting in property damage such as the degradation of rubber products and other materials.

Carbon monoxide (CO) is a colorless, odorless, and poisonous gas produced by incomplete burning of carbon in fuels. Carbon monoxide is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects to ambient CO (CARB, 2019a).

Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina (U.S. EPA, 2016). Such acute effects may occur under current ambient conditions for some sensitive individuals, while increases in ambient CO levels increases the risk of such incidences.

Nitrogen oxides (NO_x) is a brownish, highly reactive gas that is present in all urban atmospheres. The main effect of increased NO_2 is the increased likelihood of respiratory problems. Under ambient conditions, NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O_3) and acid rain and may affect both terrestrial and aquatic ecosystems. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO_2.

The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary

air pollutant nitric oxide (NO_x). NO_x plays a major role, together with ROGs, in the atmospheric reactions that produce O_3. NO_x forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO_2) is one of the multiple gaseous oxidized sulfur species and is formed during the combustion of fuels containing sulfur, primarily coal and oil. The largest anthropogenic source of SO_2 emissions in the U.S. is fossil fuel combustion at electric utilities and other industrial facilities. SO_2 is also emitted from certain manufacturing processes and mobile sources, including locomotives, large ships, and construction equipment.

SO_2 affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children, and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings, and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Short-term exposure to ambient SO_2 has been associated with various adverse health effects. Multiple human clinical studies, epidemiological studies, and toxicological studies support a causal relationship between short-term exposure to ambient SO_2 and respiratory morbidity. The observed health effects include decreased lung function, respiratory symptoms, and increased emergency department visits and hospitalizations for all respiratory causes. These studies further suggest that people with asthma are potentially susceptible or vulnerable to these health effects. In addition, SO_2 reacts with other air pollutants to form sulfate particles, which are constituents of fine particulate matter ($PM_{2.5}$). Inhalation exposure to $PM_{2.5}$ has been associated with various cardiovascular and respiratory health effects (U.S. EPA, 2017). Increased ambient SO_2 levels would lead to increased risk of such effects.

SO_2 emissions that lead to high concentrations of SO_2 in the air generally also lead to the formation of other sulfur oxides (SOx). SOx can react with other compounds in the atmosphere to form small particles. These particles contribute to particulate matter (PM) pollution. Small particles may penetrate deeply into the lungs and in sufficient quantity can contribute to health problems.

Particulate matter (PM) includes dust, dirt, soot, smoke, and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires, and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and ROGs are also considered particulate matter. PM is generally categorized based on the diameter of the particulate matter: PM_{10} is particulate matter 10 micrometers or less in diameter (known as respirable particulate matte*r*), and $PM_{2.5}$ is particulate matter 2.5 micrometers or less in diameter (known as fine particulate matter).

Based on studies of human populations exposed to high concentrations of particles (sometimes in

the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis, and premature death. Small particulate pollution causes health impacts even at very low concentrations – indeed no threshold has been identified below which no damage to health is observed.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

$PM_{2.5}$ consists of fine particles, which are less than 2.5 microns in size. Like PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the U.S. EPA created new Federal air quality standards for $PM_{2.5}$.

Although neither the U.S. EPA nor the California air districts have provided any thresholds for ultrafine particles (UFPs) (defined as fine particles of less than 0.1 microns in size, or $PM_{0.1}$), it should be noted that such particles may have the potential for even greater health effects than PM_{10} or $PM_{2.5}$, due to their even smaller sizes. UFPs are primarily generated by motor vehicle emissions (especially from diesel engines), braking, and tire wear. Specifically, UFPs are comprised mostly of metals that are known constituents of brake pads and drums, as well as additives in motor oil. Generally, all engines can create UFPs, but especially diesel engines, and any vehicle's braking system; traffic, particularly start-and-stop, generates UFPs.[2] Recent research suggests that UFPs pose considerable health risks, similar to but tending to be more severe than PM_{10} and $PM_{2.5}$, such as increased risk of cardiovascular disease and ischemic heart disease death rates, and loss of lung function.[3] Furthermore, unlike diesel exhaust or other larger TAC emissions, UFPs are more

[2] Aerosol Science and Technology. 2011. Thomas A. Cahill, David E. Barnes, Nicholas J. Spada, Jonathan A. Lawton, and Thomas M. Cahill. Very Fine and Ultrafine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003-2007. July 13, 2011.

[3] Atmospheric Environment. 2016. Thomas A. Cahill, David E. Barnes, Leann Wuest, David Gribble, David Buscho, Roger S. Miller, Camille De la Croix. Artificial Ultra-fine Aerosol Tracers for Highway Transect Studies. April 7, 2016; Aerosol Science and Technology. 2011. Thomas A. Cahil, David E. Barnes, Earl Withycombe, & Mitchell Watnik, and DELTA Group. Very Fine and Ultrafine Metals and Ischemic Heart Disease in the California Central Valley 1: 1974-1991. July 13, 2011.

persistent and do not dissipate easily over distances.[4]

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly, and children. Particulate matter also impacts soils and damages materials and is a major cause of visibility impairment.

Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Studies show that every 1 microgram per cubic meter reduction in $PM_{2.5}$ results in a one percent reduction in mortality rate for individuals over 30 years old (Bay Area Air Quality Management District, 2017). Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis – and even premature death. Additionally, depending on its composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. EPA, 2019c).

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil, or dust. Once taken into the body, lead distributes throughout the body in the blood and is accumulated in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

Lead is persistent in the environment and can be added to soils and sediments through deposition from sources of lead air pollution. Other sources of lead to ecosystems include direct discharge of waste streams to water bodies and mining. Elevated lead in the environment can result in decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates.

Lead exposure is typically associated with industrial sources; major sources of lead in the air are ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of lead are usually found near lead smelters. As a result of the U.S. EPA's regulatory efforts, including the removal of lead from motor vehicle gasoline, levels of lead in the air decreased by 98 percent between 1980 and 2014 (U.S. EPA, 2019d). Based on this reduction of lead in the air over this period, and since most new developments do not generate an increase in lead exposure, the health impacts of ambient lead levels are not typically monitored by the California Air Resources Board (CARB).

[4] Atmospheric Environment. 2016. Transition Metals in Coarse, Fine, Very Fine and Ultra-fine Particles from an Interstate Highway Transect Near Detroit. September 12, 2016.

AMBIENT AIR QUALITY STANDARDS

Both the U.S. EPA and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and State ambient air quality standards are summarized in Table 3.3-1 for important pollutants. The federal and State ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and State standards differ in some cases. In general, the California standards are more stringent. This is particularly true for ozone, $PM_{2.5}$, and PM_{10}. The U.S. EPA signed a final rule for the federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, and was effective as of December 28, 2015 (equivalent to the California state ambient air quality eight-hour standard for ozone).

TABLE 3.3-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*FEDERAL PRIMARY STANDARD*	*STATE STANDARD*
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

NOTES: PPM = PARTS PER MILLION, UG/M3 = MICROGRAMS PER CUBIC METER

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2024.

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The existing PM_{10} standards were retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated based on risk rather than specification of safe levels of contamination.

Existing air quality concerns within Fresno County and the entire air basin are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the

ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, carbon monoxide, and nitrogen dioxide as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Fresno County has a State designation Attainment or Unclassified for all criteria pollutants except for ozone, PM_{10} and $PM_{2.5}$. Fresno County has a national designation of either Unclassified or Attainment for all criteria pollutants except for Ozone and $PM_{2.5}$. Table 3.3-2 presents the state and national attainment status for Fresno County.

TABLE 3.3-2: STATE AND NATIONAL ATTAINMENT STATUS IN FRESNO COUNTY

CRITERIA POLLUTANTS	*STATE DESIGNATIONS*	*NATIONAL DESIGNATIONS*
Ozone (O_3)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassified/Attainment
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2023.

Fresno County Air Quality Monitoring

The SJVAPCD and the CARB maintain air quality monitoring sites throughout Fresno County that collect data for ozone, $PM_{2.5}$, and PM_{10}. The nearest active air quality monitoring site to the Project site is Clovis-N Villa Avenue. It is important to note that while the State retains the one-hour standard, the federal ozone 1-hour standard was revoked by the U.S. EPA and is no longer applicable for federal standards. Data obtained from the monitoring sites between 2019 and 2021 (latest year of data available) is shown in Table 3.3-3, Table 3.3-4, and Table 3.235.

TABLE 3.3-3 AMBIENT AIR QUALITY MONITORING DATA SUMMARY (CLOVIS-N VILLA AVENUE) - OZONE

YEAR	DAYS > STANDARD				1-HOUR OBSERVATIONS			8-HOUR AVERAGES				YEAR COVERAGE	
	STATE		NATIONAL			STATE	NAT'L	STATE		NATIONAL			
	1-HR	8-HR	1-HR	8-HR	MAX.	D.V.[1]	D.V.[2]	MAX.	D.V.[1]	MAX.	D.V.[2]	MIN	MAX
2021	9	37	0	34	0.123	0.11	0.120	0.1	0.095	0.100	0.083	97	98
2020	12	41	2.1	36	0.142	0.11	0.114	0.108	0.095	0.108	0.084	98	99
2019	6	30	0	27	0.103	0.11	0.109	0.080	0.090	0.079	0.084	98	98

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. THE NATIONAL 1-HOUR OZONE STANDARD WAS REVOKED IN JUNE 2005 AND IS NO LONGER IN EFFECT. STATISTICS RELATED TO THE REVOKED STANDARD ARE SHOWN IN ITALICS. D.V. [1]= STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE.

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR ADAM) AIR POLLUTION SUMMARIES.

TABLE 3.3-4: QUALITY MONITORING DATA SUMMARY (CLOVIS-N VILLA AVENUE) – PM_{10}

YEAR	EST. DAYS > STD.		ANNUAL AVERAGE		HIGH 24-HR AVERAGE		YEAR COVERAGE
	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE	
2021	No Data	112.4	37.6	43.2	125.0	208.8	95
2020	5.8	117.5	45.8	50.8	180.9	296.0	100
2019	0	65.9	32.5	32.6	150.9	155.7	100

NOTES: THE NATIONAL ANNUAL AVERAGE PM_{10} STANDARD WAS REVOKED IN DECEMBER 2006 AND IS NO LONGER IN EFFECT. AN EXCEEDANCE IS NOT NECESSARILY A VIOLATION. STATISTICS MAY INCLUDE DATA THAT ARE RELATED TO AN EXCEPTIONAL EVENT. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. NATIONAL STATISTICS ARE BASED ON STANDARD CONDITIONS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. ND=THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE.

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR ADAM) AIR POLLUTION SUMMARIES.

TABLE 3.3-5 AMBIENT AIR QUALITY MONITORING DATA SUMMARY (CLOVIS-N VILLA AVENUE) - $PM_{2.5}$

YEAR	EST. DAYS > NAT'L '06 STD.	ANNUAL AVERAGE		NAT'L ANN. STD. D.V.[1]	STATE ANNUAL D.V.[2]	NAT'L '06 STD. 98TH PERCENTILE	NAT'L '06 24-HR STD. D.V.[1]	HIGH 24-HOUR AVERAGE		YEAR COVERAGE
		NAT'L	STATE					NAT'L	STATE	
2021	22.0	15.1	No Data	No Data	18	49.6	59	104.6	104.6	100
2020	40.0	18.4	18.4	No Data	18	99.5	62	188.0	257.5	99
2019	No Data	No Data	10.2	No Data	18	28.0	45	53.7	53.7	93

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. STATE CRITERIA FOR ENSURING THAT

DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. D.V. [1] = STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE
SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR ADAM) AIR POLLUTION SUMMARIES.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases. A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals, and schools. The closest sensitive receptors to the Project site include existing residences located within the Project site itself.

3.3.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. EPA is responsible for administering the FCAA. The FCAA requires the U.S. EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and $PM_{2.5}$ ambient air quality standards indicate that certain individuals exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

NAAQS standards have been designed to accurately reflect the latest scientific knowledge and are reviewed every five years by a Clean Air Scientific Advisory Committee (CASAC), consisting of seven members appointed by the U.S. EPA Administrator. Reviewing NAAQS is a lengthy undertaking and includes the following major phases: Planning, Integrated Science Assessment (ISA), Risk/Exposure Assessment (REA), Policy Assessment (PA), and Rulemaking. The process starts with a comprehensive review of the relevant scientific literature. The literature is summarized and conclusions are presented in the ISA. Based on the ISA, U.S. EPA staff perform a risk and exposure assessment, which is summarized in the REA document. The third document, the PA, integrates the findings and conclusions of the ISA and REA into a policy context, and provides lines of reasoning that could be used to support retention or revision of the existing NAAQS, as well as several alternative standards that could be supported by the review findings. Each of these three documents are released for public comment and public peer review by the CASAC. Members of CASAC are appointed by the U.S. EPA Administrator for their expertise in one or more of the subject areas covered in the ISA. The CASAC's role is to peer review the NAAQS documents, ensure that they reflect the thinking of the scientific community, and advise the Administrator on the technical and scientific aspects of standard setting. Each document goes through two to three drafts before CASAC deems it to be final.

Although there is some variability among the health effects of the NAAQS pollutants, each has been

linked to multiple adverse health effects including, among others, premature death, hospitalizations, and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. NAAQS standards were last revised for each of the six criteria pollutant as listed below, with detail on what aspects of NAAQS changed during the most recent update:

- Ozone: On October 1, 2015, the U.S. EPA lowered the national eight-hour standard from 0.075 ppm to 0.070 ppm, providing for a more stringent standards consistent with the current California state standard.
- CO: In 2011, the primary standards were retained from the original 1971 level, without revision. The secondary standards were revoked in 1985.
- NO_2: The national NO_2 standard was most recently revised in 2010 following an exhaustive review of new literature pointed to evidence for adverse effects in asthmatics at lower NO_2 concentrations than the existing national standard.
- SO_2: On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99^{th} percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb.
- PM: the national annual average $PM_{2.5}$ standard was most recently revised in 2012 following an exhaustive review of new literature pointed to evidence for increased risk of premature mortality at lower $PM_{2.5}$ concentrations than the existing standard.
- Lead: The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. In 2016, the primary and secondary standards were retained.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the U.S. EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. The CARB is the state agency that is responsible for preparing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the U.S. EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by U.S. EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas. Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the proposed Project, such as the Metropolitan Planning Organization,

the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

Advanced Clean Cars II

The Advanced Clean Cars II regulations reduce light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, it amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards. These amendments support Governor Newsom's 2020 Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

Advanced Clean Trucks

On June 25, 2020, the California Air Resources Board (CARB) adopted the Advanced Clean Trucks (ACT) rule, which requires the sale of zero-emission or near zero-emission HDTs starting with the manufacturer-designated model year 2024. Sales requirements are defined separately for three vehicle groups: Class 2b-3 trucks and vans, Class 4-8 rigid trucks, and Class 7-8 tractor trucks. The regulation is structured as a credit and deficit accounting system. In 2023, the EPA granted the state the waiver it needs to enact the ACT rule. The enacted rule requires truck makers to sell an increasing percentage of electric models annually through 2035. Forty percent of big rigs, half of all cargo and travel vans and 75 percent of box truck and dump truck sales need to be zero emissions by 2035.

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the State. Rather than mandating the use of specific technology or the reliance on a specific fuel,

the CARB motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the way they are achieved. Towards this end, the CARB has adopted regulations which require auto manufacturers to phase in less polluting vehicles.

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. The CARB is the agency responsible for administering the CCAA. The CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are like the federal standards.

California Air Quality Standards

Although NAAQS are determined by the U.S. EPA, states can set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates, and lead. In addition, California has created standards for pollutants that are not covered by federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations, and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. The existing state and federal primary standards for major pollutants are shown in Table 3.3-1.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to develop a recommendation for the standard. The recommendation can be for no change, or can recommend a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. The ARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board at a regularly scheduled Board hearing.

In June of 2002, the CARB adopted revisions to the PM_{10} standard and established a new $PM_{2.5}$ annual standard. The new standards became effective in June 2003. Subsequently, staff reviewed the published scientific literature on ground-level ozone and nitrogen dioxide and the CARB adopted revisions to the standards for these two pollutants. Revised standards for ozone and nitrogen dioxide went into effect on May 17, 2006 and March 20, 2008, respectively. These revisions

reflect the most recent changes to the CAAQS.

Tanner Air Toxics Act (TACs)

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted U.S. EPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technologies (BACT) to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, CARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule.

Omnibus Low-NOx Rule

The CARB approved the Omnibus Low-NOx Rule on August 28, 2020, which will require engine NOx emissions to be cut to approximately 75% below current standards beginning in 2024, and 90% below current standards in 2027. The rule also places nine additional regulatory requirements on new heavy-duty truck and engines. Those additional requirements include a 50% reduction in particulate matter emissions, stringent new low-load and idle standards, a new in-use testing protocol, extended deterioration requirements, a new California-only credit program, and extended mandatory warranty requirements. The regulatory requirements in the Omnibus Low-NOX Rule will first become effective in 2024, at the same time as the Advanced Clean Trucks regulations that CARB approved that mandates manufacturers convert increasing percentages of their heavy-duty trucks sold in California to zero-emission vehicles.

Assembly Bill 170

Assembly Bill 170, Reyes (AB 170), was adopted by state lawmakers in 2003, creating Government Code Section 65302.1, which requires cities and counties in the San Joaquin Valley to amend their general plans to include data and analysis, comprehensive goals, policies, and feasible implementation strategies designed to improve air quality. The elements to be amended include,

but are not limited to, those elements dealing with land use, circulation, housing, conservation, and open space. Section 65302.1.c identifies four areas of air quality discussion required in these amendments:

- A report describing local air quality conditions, attainment status, and state and federal air quality and transportation plans;
- A summary of local, district, state, and federal policies, programs, and regulations to improve air quality;
- A comprehensive set of goals, policies, and objectives to improve air quality; and
- Feasible implementation measures designed to achieve these goals.

LOCAL

City of Clovis General Plan

The City of Clovis General Plan includes several policies that are relevant to air quality. General Plan goals and policies applicable to the Project are identified below:

Policies: Circulation Element

- Goal 1: A context-sensitive and "complete streets" transportation network that prioritizes effective connectivity and accommodates a comprehensive range of mobility needs.
- Policy 1.1: Multimodal network. The city shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.
- Policy 1.2: Transportation decisions. Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists.
- Policy 1.3: Age and mobility. The design of roadways shall consider all potential users, including children, seniors, and persons with disabilities.
- Policy 1.4: Jobs and housing. Encourage infill development that would provide jobs and services closer to housing, and vice versa, to reduce citywide vehicle miles travelled and effectively utilize the existing transportation infrastructure.
- Policy 1.5: Neighborhood connectivity. The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses).
- Policy 1.6: Internal circulation. New development shall utilize a grid or modified-grid street pattern. Areas designated for residential and mixed-use village developments should feature short block lengths of 200 to 600 feet.
- Policy 1.7: Narrow streets. The City may permit curb-to-curb dimensions that are narrower than current standards on local streets to promote pedestrian and bicycle connectivity and enhance safety.
- Policy 1.8: Network completion. New development shall complete the extension of stub streets planned to connect to adjacent streets, where appropriate.
- Goal 4: A bicycle and transit system that serves as a functional alternative to commuting by car.

- Policy 4.1: Bike and transit backbone. The bicycle and transit system should connect Shaw Avenue, Old Town, the Medical Center/R&T Park, and the three Urban Centers.
- Policy 4.2: Priority for new bicycle facilities. Prioritize investments in the backbone system over other bicycle improvements.
- Policy 4.3: Freeway crossings. Require separate bicycle and pedestrian crossings for new freeway extensions and encourage separate crossings where Class I facilities are planned to cross existing freeways.
- Policy 4.4: Bicycles and transit. Coordinate with transit agencies to integrate bicycle access and storage into transit vehicles, bus stops, and activity centers.
- Policy 4.5: Transit stops. Improve and maintain safe, clean, comfortable, well-lit, and rider-friendly transit stops that are well marked and visible to motorists.
- Policy 4.6: Transit priority corridors. Prioritize investments for, and transit services and facilities along the transit priority corridors.
- Policy 4.7: Bus rapid transit. Plan for bus rapid transit and transit-only lanes on transit priority corridors as future ridership levels increase.
- Goal 5: A complete system of trails and pathways accessible to all residents.
- Policy 5.1: Complete street amenities. Upgrade existing streets and design new streets to include complete street amenities, prioritizing improvements to bicycle and pedestrian connectivity or safety, consistent with the Bicycle Transportation Master Plan and other master plans.
- Policy 5.2: Development-funded facilities. Require development to fund and construct facilities as shown in the Bicycle Transportation Plan when facilities are in or adjacent to the development.
- Policy 5.3: Pathways. Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger.
- Policy 5.4: Homeowner associations. The city may require homeowner associations to maintain pathways and other bicycle and pedestrian facilities within the homeowner association area.
- Policy 5.5: Pedestrian access. Require sidewalks, paths, and crosswalks to provide access to schools, parks, and other activity centers and to provide general pedestrian connectivity throughout the city.
- Goal 6: Safe and efficient goods movement with minimal impacts on local roads and neighborhoods.
- Policy 6.1: Truck routes. Plan and designate truck routes that minimize truck traffic through or near residential areas.
- Policy 6.2: Land use. Place industrial and warehousing businesses near freeways and truck routes to minimize truck traffic through or near residential areas.

Policies: Air Quality Element

- Goal 1: A local environment that is protected from air pollution and emissions.
- Policy 1.1: Land use and transportation. Reduce greenhouse gas and other local pollutant emissions through mixed use and transit-oriented development and well-designed transit, pedestrian, and bicycle systems.

- Policy 1.2: Sensitive Land Uses. Prohibit, without sufficient mitigation, the future siting of sensitive land uses within the distances of emission sources as defined by the California Air Resources Board.
- Policy 1.3: Construction activities. Encourage the use of best management practices during construction activities to reduce emissions of criteria pollutants as outlined by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- Policy 1.4: City buildings. Require that municipal buildings be designed to exceed energy and water conservation and greenhouse gas reduction standards set in the California Building Code.
- Policy 1.5: Fleet operations. Purchase low- or zero-emission vehicles for the city's fleet where feasible. Use clean fuel sources for city-owned mass transit vehicles, automobiles, trucks, and heavy equipment where feasible.
- Policy 1.6: Alternative fuel infrastructure. Encourage public and private activity and employment centers to incorporate electric charging and alternative fuel stations.
- Policy 1.7: Employment measures. Encourage employers to provide programs, scheduling options, incentives, and information to reduce vehicle miles traveled by employees.
- Policy 1.8: Trees. Maintain or plant trees where appropriate to provide shade, absorb carbon, improve oxygenation, slow stormwater runoff, and reduce the heat island effect.
- Goal 2: A region with healthy air quality and lower greenhouse gas emissions.
- Policy 2.1: Regional coordination. Support regional efforts to reduce air pollution (criteria air pollutants and greenhouse gas emissions) and collaborate with other agencies to improve air quality at the emission source and reduce vehicle miles traveled.
- Policy 2.2: Cross-jurisdictional issues. Collaborate with regional agencies and surrounding jurisdictions to address cross-jurisdictional transportation and air quality issues.
- Policy 2.3: Valleywide programs. Establish parallel air quality programs and implementation measures with other communities across the San Joaquin Valley.
- Policy 2.4: Public participation. Encourage participation of local citizens, the business community, and interested groups and individuals in air quality planning and implementation.
- Policy 2.5: Public education. Promote programs that educate the public about regional air quality issues and solutions.
- Policy 2.6: Innovative mitigation. Encourage innovative mitigation measures to reduce air quality impacts by coordinating with the SJVAPCD, project applicants, and other interested parties.

San Joaquin Valley Air Pollution Control District

The primary role of SJVAPCD is to develop plans and implement control measures in the SJVAB to control air pollution. These controls primarily affect stationary sources such as industry and power plants. Rules and regulations have been developed by SJVAPCD to control air pollution from a wide range of air pollution sources. SJVAPCD also provides uniform procedures for assessing potential air quality impacts of proposed projects and for preparing the air quality section of environmental documents.

AIR QUALITY PLANNING

The U.S. EPA requires states that have areas that do not meet the National AAQS to prepare and submit air quality plans showing how the National AAQS will be met. If the states cannot show how the National AAQS will be met, then the states must show progress toward meeting the National AAQS. These plans are referred to as the State Implementation Plans (SIP). California's adopted 2007 State Strategy was submitted to the U.S. EPA as a revision to its SIP in November 2007.[5] More recently, in October 2018, the CARB adopted the 2018 Updates to the California State Implementation Plan.

In addition, the CARB requires regions that do not meet California AAQS for ozone to submit clean air plans (CAPs) that describe measures to attain the standard or show progress toward attainment. To ensure federal CAA compliance, SJVAPCD is currently developing plans for meeting new National AAQS for ozone and $PM_{2.5}$ and the California AAQS for PM_{10} in the SJVAB (for California CAA compliance).[6] The following describes the air plans prepared by the SJVAPCD, which are incorporated by reference per CEQA Guidelines Section 15150.

1-HOUR OZONE PLAN

Although U.S. EPA revoked its 1979 1-hour ozone standard in June 2005, many planning requirements remain in place, and SJVAPCD must still attain this standard before it can rescind CAA Section 185 fees. The SJVAPCD's most recent 1-hour ozone plan, the 2013 Plan for the Revoked 1-hour Ozone Standard, demonstrated attainment of the 1-hour ozone standard by 2017. However, on July 18, 2016, the U.S. EPA published in the Federal Register a final action determining that SJVAB has attained the 1-hour ozone NAAQS based on the 2012 to 2014 three-year period allowing nonattainment penalties to be lifted under federal Clean Air Act section 179b (SJVAPCD, 2015).

8-HOUR OZONE PLAN

The SJVAPCD's Governing Board adopted the 2007 Ozone Plan on April 30, 2007. This far-reaching plan, with innovative measures and a "dual path" strategy, assures expeditious attainment of the federal 8-hour ozone standard as set by U.S. EPA in 1997. The plan projects that the valley will achieve the 8-hour ozone standard for all areas of the SJVAB no later than 2023. The CARB approved the plan on June 14, 2007. The U.S. EPA approved the 2007 Ozone Plan effective April 30, 2012. SJVAPCD adopted the 2016 Ozone Plan to address the federal 2008 8-hour ozone standard, which must be attained by end of 2031.[7,8]

[5] Note that the plan was adopted by CARB on September 27, 2007; California Air Resources Board. 2007. California Air Resources Board's Proposed State Strategy for California's 2007 State Implementation Plan.

[6] SJVAPCD, 2012. 2012 $PM_{2.5}$ Plan.

[7] SJVAPCD. Ozone Plans. http://www.valleyair.org/ Air_Quality_Plans/Ozone_Plans.htm, accessed April 23, 2024.

[8] SJVAPCD. 2016 Plan for the 2008 8-Hour Ozone Standard, http://www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm, accessed April 23, 2024.

PM_{10} PLAN

Based on PM_{10} measurements from 2003 to 2006, the U.S. EPA found that the SJVAB has reached federal PM_{10} standards. On September 21, 2007, the SJVAPCD's Governing Board adopted the 2007 PM_{10} Maintenance Plan and Request for Redesignation. This plan demonstrates that the valley will continue to meet the PM_{10} standard. U.S. EPA approved the document and on September 25, 2008, the SJVAB was redesignated to attainment/maintenance (SJVAPCD, 2015).

PM2.5 PLAN

The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards on November 15, 2018.[9] This plan addresses the U.S. EPA federal 1997 annual $PM_{2.5}$ standard of 15 µg/m³ and 24-hour $PM_{2.5}$ standard of 65 µg/m³; the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m³; and the 2012 annual $PM_{2.5}$ standard of 12 µg/m³. This plan demonstrates attainment of the federal $PM_{2.5}$ standards as expeditiously as practicable (SJVAPCD, 2020).

All the above-referenced plans include measures (i.e., federal, state, and local) that would be implemented through rule making or program funding to reduce air pollutant emissions in the SJVAB. Transportation control measures are part of these plans.

SJVAPCD RULES AND REGULATIONS

SJVAPCD Indirect Source Review

On December 15, 2005, SJVAPCD adopted the Indirect Source Review Rule (ISR or Rule 9510) to reduce ozone precursors (i.e., ROG and NOx) and PM_{10} emissions from new land use development projects. Specifically, Rule 9510 targets the indirect emissions from vehicles and construction equipment associated with these projects and applies to both construction and operational-related impacts. The rule applies to any applicant that seeks to gain a final discretionary approval for a development project, or any portion thereof, which upon full buildout would include any one of the following:

- 50 residential units.
- 2,000 square feet of commercial space.
- 25,000 square feet of light industrial space.
- 100,000 square feet of heavy industrial space.
- 20,000 square feet of medical office space.
- 39,000 square feet of general office space.
- 9,000 square feet of educational space.
- 10,000 square feet of government space.
- 20,000 square feet of recreational space.
- 9,000 square feet of space not identified above.
- Transportation/transit projects with construction exhaust emissions of two or more tons of

[9] SJVAPCD. Particulate Matter Plans. http://valleyair.org/Air_Quality_Plans/PM_Plans.htm, accessed April 23, 2024.

NOx or two or more tons of PM_{10}.

- Residential projects on contiguous or adjacent property under common ownership of a single entity in whole or in part, that is designated and zoned for the same development density and land use, regardless of the number of tract maps, and has the capability of accommodating more than 50 residential units.
- Nonresidential projects on contiguous or adjacent property under common ownership of a single entity in whole or in part, that is designated and zoned for the same development density and land use, and has the capability of accommodating development projects that emit two or more tons per year of NOx or PM_{10} during project operations.

The rule requires all subject, nonexempt projects to mitigate both construction and operational period emissions by (1) applying feasible SJVAPCD-approved mitigation measures, or (2) paying any applicable fees to support programs that reduce emissions. Off-site emissions reduction fees (off-site fee) are required for projects that do not achieve the required emissions reductions through on-site emission reduction measures. Phased projects can defer payment of fees in accordance with an Off-site Emissions Reduction Fee Deferral Schedule (FDS) approved by the SJVAPCD.

To determine how an individual project would satisfy Rule 9510, each project would submit an air quality impact assessment (AIA) to the SJVAPCD as early as possible, but no later than prior to the project's final discretionary approval, to identify the project's baseline unmitigated emissions inventory for indirect sources: on-site exhaust emissions from construction activities and operational activities from mobile and area sources of emissions (excludes fugitive dust and permitted sources). Rule 9510 requires the following reductions, which are levels that the SJVAPCD has identified as necessary, based on their air quality management plans, to reach attainment for ozone and particulate matter:

Construction Equipment Emissions

The exhaust emissions for construction equipment greater than 50 horsepower (hp) used or associated with the development project shall be reduced by the following amounts from the statewide average as estimated by CARB:

- 20 percent of the total NOx emissions
- 45 percent of the total PM_{10} exhaust emissions

Mitigation measures may include those that reduce construction emissions on-site by using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer, lower emitting equipment.

Operational Emissions

- NOx Emissions. Applicants shall reduce 33.3 percent of the project's operational baseline NOx emissions over a period of 10 years as quantified in the approved AIA.
- PM_{10} Emissions. Applicants shall reduce of 50 percent of the project's operational baseline PM_{10} emissions over a period of 10 years as quantified in the approved AIA.

These requirements listed above can be met through any combination of on-site emission reduction

measures. If a project cannot achieve the above standards through imposition of mitigation measures, then the project would be required to pay the applicable off-site fees. These fees are used to fund various incentive programs that cover the purchase of new equipment, engine retrofit, and education and outreach.

Fugitive PM_{10} Prohibitions

SJVAPCD controls fugitive PM_{10} through Regulation VIII, Fugitive PM_{10} Prohibitions. The purpose of this regulation is to reduce ambient concentrations of PM_{10} and $PM_{2.5}$ by requiring actions to prevent, reduce, or mitigate anthropogenic (human caused) fugitive dust emissions.

- Regulation VIII, Rule 8021 applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on-site, and travel on access roads to and from the site.
- Regulation VIII, Rule 8031 applies to the outdoor handling, storage, and transport of any bulk material.
- Regulation VIII, Rule 8041 applies to sites where carryout or trackout has occurred or may occur on paved roads or the paved shoulders of public roads.
- Regulation VIII, Rule 8051 applies to any open area having 0.5 acre or more within urban areas or 3.0 acres or more within rural areas, and contains at least 1,000 square feet of disturbed surface area.
- Regulation VIII, Rule 8061 applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.
- Regulation VIII, Rule 8071 applies to any unpaved vehicle/equipment traffic area.
- Regulation VIII, Rule 8081 applies to off-field agricultural sources.

Sources regulated are required to provide Dust Control Plans that meet the regulation requirements. Under Rule 8021, a Dust Control Plan is required for any residential project that will include 10 or more acres of disturbed surface area, a nonresidential project with 5 or more acres of disturbed surface area, or a project that relocates 2,500 cubic yards per day of bulk materials for at least three days. The Dust Control Plan is required to be submitted to SJVAPCD prior to the start of any construction activity. The Dust Control Plan must also describe fugitive dust control measure to be implemented before, during, and after any dust-generating activity. For sites smaller than those listed above, the project is still required to notify SJVAPCD a minimum of 48 hours prior to commencing earthmoving activities.

National Emission Standards for Hazardous Air Pollutants

Rule 4002 applies in the event an existing building will be renovated, partially demolished, or removed (National Emission Standards for Hazardous Air Pollutants); this rule applies to all sources of Hazardous Air Pollutants.

Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

If asphalt paving will be used, then paving operations of the proposed Project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

Nuisance Odors

SJVAPCD controls nuisance odors through implementation of Rule 4102, Nuisance. Pursuant to this rule, "a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property."

Employer Based Trip Reduction Program

SJVAPCD has implemented Rule 9410, Employer Based Trip Reduction. The purpose of this rule is to reduce VMT from private vehicles used by employees to commute to and from their worksites to reduce emissions of NOx, ROG, and particulate matter (PM_{10} and $PM_{2.5}$). The rule applies to employers with at least 100 employees. Employers are required to implement an Employer Trip Reduction Implementation Plan (ETRIP) for each worksite with 100 or more eligible employees to meet applicable targets specified in the rule. Employers are required to facilitate the participation of the development of ETRIPs by providing information to its employees explaining the requirements and applicability of this rule. Employers are required to prepare and submit an ETRIP for each worksite to the District. The ETRIP must be updated annually. Under this rule, employers shall collect information on the modes of transportation used for each eligible employee's commutes both to and from work for every day of the commute verification period, as defined in using either the mandatory commute verification method or a representative survey method. Annual reporting includes the results of the commute verification for the previous calendar year along with the measures implemented as outlined in the ETRIP and, if necessary, any updates to the ETRIP.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

APPROACH TO ANALYSIS

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the SJVAPCD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project would exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. The applicable SJVAPCD thresholds and

methodologies are contained under each impact statement below, as the City, in its discretion, has determined to utilize these thresholds and methodologies, which are based on scientific and factual data.

This analysis was performed consistent with the guidance and methodologies provided by the SJVAPCD's GAMAQI.[10] Based on the SJVAPCD New Source Review (NSR) offset requirements for stationary sources, the SJVAPCD has established thresholds of significance for criteria pollutant emissions, shown in Table 3.3-6. These thresholds apply to the project because these air pollutants would be generated during project construction and operation and constitute criteria pollutants or precursor emissions for criteria pollutants, which are regulated by the federal and State Clean Air Acts.

TABLE 3.3-6: SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT SIGNIFICANCE THRESHOLDS

POLLUTANT	*CONSTRUCTION THRESHOLDS (TPY)*	*OPERATIONAL THRESHOLDS (TPY)*
ROG	10	10
NOx	10	10
CO	100	100
SOx	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

SOURCES: SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT (SJVAPCD). 2015. GUIDANCE FOR ASSESSING AND MITIGATING AIR QUALITY IMPACT. WEBSITE: HTTPS://WWW.VALLEYAIR.ORG/TRANSPORTATION/CEQA%20RULES/GAMAQI%20JAN%202002%20REV.PDF ACCESSED APRIL 23, 2024.

CRITERIA POLLUTANT EMISSIONS MODELING

California Emission Estimator Model (CalEEMod)™ (v.2022.1), developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with California air districts, was used to estimate emissions for the proposed Project. Project construction was assumed to be completed in 2030. However, the exact timing of Project construction would depend on market conditions. The modeled construction schedule is conservative, in that it assumes buildout of the Project much earlier than when it is likely to occur; this represents a conservative approach to modeling, since the emissions efficiency of on- and off-road construction vehicles would increase over time.

The land use assumptions for the modeling are consistent with the land uses modeled by Kittelson & Associates for their *Clovis Vista Ranch CEQA Transportation Evaluation* (chosen on a best fit basis, given the available land uses within the CalEEMod model):

[10] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impact. Website: https://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf Accessed April 23, 2024.

- MPArea 1:
    - Single Family Housing (1,268 dwelling units);
    - Condo/Townhouse (1,039 dwelling units);
    - Apartments Midrise (500 dwelling units);
    - Strip Mall (85,000 square feet).
- MPArea 2:
    - Single-family Residential (137 dwelling units);
    - Single-family Residential (224 dwelling units);
    - Strip Mall (115,000 square feet);
    - Office Park (421,356 square feet);
    - Elementary School (750 students).
- Overall:
    - City Park (59 acres).

Vehicle trips and VMT used in the modeling are also consistent with those provided by Kittelson & Associates in its traffic analysis for the proposed Project.

The construction phase details are provided in Table 3.3-7, below. The construction schedule was adjusted based on Project size and type. Project operation was assumed to occur by 2030. However, both the actual construction schedule and the actual start date for Project operation would depend on market demand. It should be noted that, if the proposed Project were to be constructed over a longer timeframe than as modeled and/or start of operation to occur after 2030, construction-related emissions are anticipated to be less than as analyzed herein. This is because construction- and operation-related air pollutant emissions factors tend to reduce over time, due to increasing stringency in State and federal emissions regulations, as well as due to technological innovation. See Appendix C of this Draft EIR for additional detail regarding assumptions associated with the CalEEMod modeling.

TABLE 3.3-7: ANTICIPATED CONSTRUCTION SCHEDULE

CALEEMOD PHASE	*CALEEMOD PHASE START DATE*	*CALEEMOD PHASE END DATE*
Demolition	10/1/2024	12/1/2024
Site Preparation	12/2/2024	6/7/2025
Grading	6/8/2025	1/1/2026
Building Construction	1/2/2026	12/31/2029
Paving	1/2/2026	12/31/2026
Architectural Coatings	1/2/2027	12/31/2029

SOURCE: CALEEMOD (V.2022.1)

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Project operation has the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan. (Significant and Unavoidable)

The SJVAPCD is tasked with implementing programs and regulations required by the Federal Clean Air Act and the California Clean Air Act. In that capacity, the SJVAPCD has prepared plans to attain Federal and State ambient air quality standards. To achieve attainment with the standards, the SJVAPCD has established thresholds of significance for criteria pollutant emissions in their *SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts* (2015). Projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan."

The proposed Project would be both a direct and indirect source of air pollution. Direct sources of pollution include area, energy, and water and waste sources, due to development of the on-site buildings and associated infrastructure. Indirect sources of pollution would be due to the generation of trips of from vehicles traveling to and from the Project site.

CalEEMod™ (v.2022.1) was used to model operational emissions of the proposed Project. Table 3.3-8 shows proposed Project unmitigated emissions as provided by CalEEMod. The SJVAPCD provides a list of applicable air quality emissions thresholds.

TABLE 3.3-8: OPERATIONAL PROJECT GENERATED EMISSIONS (TONS PER YEAR) - UNMITIGATED

POLLUTANT	*CO*	*NOX*	*ROG*	*SOX*	*PM_{10}*	*$PM_{2.5}$*
THRESHOLD	100	10	10	27	15	15
EMISSIONS						
MOBILE	155	21.9	22.4	0.4	41.7	10.8
AREA	18.9	0.2	24.7	0.1	<0.1	<0.1
ENERGY	3.1	6.2	0.4	0.0	0.5	0.5
TOTAL EMISSIONS	**177**	**28.2**	**47.5**	**0.5**	**42.2**	**11.3**
EXCEEDS THRESHOLD?	**Y**	**Y**	**Y**	**N**	**Y**	**N**

SOURCES: CALEEMOD (V.2022.1)

The SJVAPCD has established their thresholds of significance by which the Project emissions are compared against to determine the level of significance. The SJVAPCD has established operations related emissions thresholds of significance as follows: 100 tons per year of carbon monoxide (CO), 10 tons per year of oxides of nitrogen (NO_x), 10 tons per year of reactive organic gases (ROG), 27 tons per year of sulfur oxides (SO_x), 15 tons per year particulate matter of 10 microns or less in size (PM_{10}), and 15 tons per year particulate matter of 2.5 microns or less in size ($PM_{2.5}$). If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for operational-generated emissions, the proposed Project will have a significant impact on air quality and all feasible

mitigation are required to be implemented to reduce emissions to the extent feasible. As shown in Table 3.3-8 above, the unmitigated operational emissions would exceed the SJVACPD operational thresholds of significance for CO, NOx, ROG, and PM_{10}. Based on this, mitigation measures are required to be implemented to reduce CO, NOx, ROG, and PM_{10} emissions.

The Project's operational CO, NOx, and PM_{10} emissions are primarily from the Project's mobile vehicle emissions. However, most ROG emissions, and a substantial source of CO emissions, are from area sources, which include off-gassing from architectural coatings, off-gassing from consumer products, and the usage of landscape equipment. The only feasible mitigation to reduce the Project's operational-related area source emissions are to reduce the ROG content off-gassed from architectural coatings (by using architectural coatings that have fewer ROG emissions) and by utilizing landscaping equipment with fewer or no ROG emissions. There is no feasible mitigation to reduce mobile vehicle ROG emissions, or to reduce the amount of ROG off-gassing from consumer products, as these are not activities that the Project applicant would have the ability to feasibly influence. There are also limited feasible ways to reduce the Project's CO, NOx, or PM_{10} emissions, as these emissions are overwhelmingly produced by mobile vehicles, and the proposed Project has no feasible way of reducing such emissions at the Project level.

Overall, the Project would be required to implement Mitigation Measure 3.3-1 through Mitigation Measure 3.3-4, below. Mitigation Measures 3.3-1 through 3.3-3 provide specific mitigation measures for the Project as a whole, while Mitigation Measure 3.3-4 provides an additional requirement for each planning area to prepare individual criteria pollutant reduction plans (CPRPs), specific to each planning area. Table 3.3-9, below, discloses of the emissions that would occur inclusive of implementation of Mitigation Measure 3.3-1 through Mitigation Measure 3.3-3.[11] Mitigation Measure 3.3-4 is not quantified herein, since the exact nature of the measures associated with it, and the specific quantified reductions associated with them, cannot be known at this time.

TABLE 3.3-9: OPERATIONAL PROJECT GENERATED EMISSIONS (TONS PER YEAR) - MITIGATED

POLLUTANT	*CO*	*NOX*	*ROG*	*SOX*	*PM_{10}*	*$PM_{2.5}$*
THRESHOLD	100	10	10	27	15	15
EMISSIONS						
MOBILE	155	21.9	22.4	0.4	41.7	10.8
AREA	0	0	21.6	0	0	0
ENERGY	3.1	6.2	0.4	0.1	0.5	0.5
TOTAL EMISSIONS	**158**	**28.1**	**44.4**	**0.5**	**42.2**	**11.3**
EXCEEDS THRESHOLD?	**Y**	**Y**	**Y**	**N**	**Y**	**N**

[11] It should be noted that since it is unclear to what extent on-site solar would be implemented, on-site solar PV for the purposes of Mitigation Measure 3.3-3 was assumed to offset only approximately 30% of the residential electricity consumption, consistent with the existing requirements of Title 24 of the California Building Energy Efficiency Standards (California Energy Code), for the sake of a conservative assessment. Also, for the sake of a conservative assessment, non-residential electricity consumption was assumed to not be offset whatsoever.

SOURCES: CALEEMOD (V.2022.1)

As shown in Table 3.3-9, above, with implementation of Mitigation Measure 3.3-1 through 3.3-3, the Project's CO emissions would be reduced from approximately 177 to 158 tons per year, NOx emissions could be reduced from approximately 28.2 to 28.1 tons per year, and ROG emissions could be reduced from approximately 47.5 to 44.4 tons per year, with the implementation of Mitigation Measures 3.3-1 through 3.3-3. However, even with implementation of Mitigation Measures 3.3-1 through 3.3-3, emissions reductions would not be sufficient to ensure a reduction of CO, NOx, ROGs, and PM_{10} to below the applicable Air District criteria pollutant thresholds, as shown in Table 3.3-9. Therefore, this impact would be considered ***significant and unavoidable***.

REGULATORY COMPLIANCE

In accordance with SJVAPCD Rule 9510, an Air Impact Assessment (AIA) is required to be prepared based on the applicability and exemption criteria of Rule 9510.[12] The rule includes general mitigation requirements for construction and/or operational emissions. Per the general mitigation requirements of Rule 9510, the Project is required to reduce the project's operational baseline NOx emissions by 33.3% over a period of ten years as quantified in the approved AIA. The project is also required to pay any off-site fees in full by the invoice due date or prior to generating the emissions associated with the Project or any phase thereof, whichever occurs first.

Separately, the Project would comply with SJVAPCD Rule 4101, which prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants. Furthermore, the project would comply with SJVAPCD Rule 4601, which limits requires the Project to abide by more stringent VOC emissions requirements. Emissions of volatile organic compounds from architectural coatings by specifying storage, clean up and labeling requirements.

Implementation of these and other SJVAPCD rules and regulations would further reduce Project emissions below the levels identified in Table 3.3-9.

PROJECT EFFECTS ON PUBLIC HEALTH

Criteria pollutants generated by the Project are associated with some form of health risk (e.g., asthma). Criteria pollutants can be classified as either regional or localized pollutants. Regional pollutants can be transported over long distances and affect ambient air quality far from the emissions source. Localized pollutants affect ambient air quality near the emissions source. Ozone is considered a regional criteria pollutant, whereas CO, NO_2, SO_2, and lead (Pb) are localized pollutants. PM can be both a local and a regional pollutant, depending on its composition. The SJVAPCD establishes thresholds at levels that allow the SJVAPCD to come into compliance with the CAAQS and NAAQS. The CAAQS and NAAQS are set at levels protective of human health, and

[12] Available at: https://www.valleyair.org/rules/currntrules/r9510-a.pdf. Accessed: September 2023.

emissions below the SJVAPCD thresholds are deemed to not have a significant impact on human health.

Ozone

O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) (also known as ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function, and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths (U.S. EPA 2019a). The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggest that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 parts per billion (U.S. EPA 2019b).

Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The Environmental Benefits Mapping and Analysis Program (BenMAP), developed by the U.S. EPA, is a powerful and flexible tool that helps users estimate human health effects and economic benefits resulted from changes in air quality. BenMAP outputs include PM- and ozone-related health endpoints such as premature mortality, hospital admissions, and emergency room visits. BenMAP calculates background health incidence rates based on the available health statistics and population data, with preference given to individual-level data counts (e.g., mortality counts or hospital and emergency department discharges) at the County-level. For California counties, data were available at the individual-level. The background health incidence data are also based on different years depending on data availability. For example, hospital admissions and emergency department visits for California are based on 2011 data. For mortality background incidence rates, the U.S. EPA obtained data for 2012-2014 from the Centers for Disease Control WONDER database[13], and generated age-, cause-, and county-specific mortality rates as described in the BenMAP manual.

[13] See: http://wonder.cdc.gov

The estimated background health incidences of mean ozone annual health effects across the San Joaquin Valley are shown in Table 3.3-10.[14],[15] The background health incidences provide an estimate of the average number of people over a given population that suffer from some adverse health effect over a given period. For example, the background health incidence in the San Joaquin Valley for total asthma-related emergency room visits for adults is 11,039 per year; this represents approximately 0.3% of the population as experiencing such incidents each year. Therefore, as shown in Table 3.3-10, the background health incidents for various ozone-related health endpoints is less than one percent for each of the health endpoints studied. This represents a relatively low rate of health incidents from cumulative regional ozone emissions, when compared to the population.

TABLE 3.3-10: BENMAP-ESTIMATED ANNUAL MEAN OZONE HEALTH EFFECTS OF THE PROJECT EMISSIONS ACROSS THE SAN JOAQUIN VALLEY MODEL DOMAIN[1]

HEALTH ENDPOINT[2]	*BACKGROUND HEALTH INCIDENCE (ANNUAL)*	*SAN JOAQUIN VALLEY POPULATION[16]*	*PERCENTAGE OF BACKGROUND HEALTH INCIDENTS AS A PROPORTION OF POPULATION*
HOSPITAL ADMISSIONS, ALL RESPIRATORY [65-99]	35,103	4,300,000	0.8%
MORTALITY, RESPIRATORY [30-99]	11,222	4,300,000	0.3%
EMERGENCY ROOM VISITS, ASTHMA [0-17]	11,039	4,300,000	0.3%
EMERGENCY ROOM VISITS, ASTHMA [18-99]	25,345	4,300,000	0.6%

NOTES: [1]HEALTH EFFECTS ARE SHOWN TERMS OF INCIDENCES OF EACH HEALTH ENDPOINT AND HOW IT COMPARES TO THE BASE VALUES. YEAR 2025 IS USED FOR BASE YEAR HEALTH EFFECT INCIDENCES, OR "BACKGROUND HEALTH INCIDENCE". HEALTH EFFECTS AND BACKGROUND HEALTH INCIDENCES ARE ACROSS THE SAN JOAQUIN VALLEY MODEL DOMAIN.[2] AFFECTED AGE RANGES ARE SHOWN IN SQUARE BRACKETS.
SOURCE: RAMBOLL, 2023.

The Project would generate emissions of ROG and NOx during Project operational activities, as shown in Table 3.3-8 and Table 3.3-9. Increases in ROG and NOx could affect people with impaired respiratory systems, but also healthy adults and children. Although NOx would not exceed the applicable air district criteria pollutant threshold, operational ROG would exceed the applicable air district criteria pollutant threshold. These increases in ROG would be primarily due to the operational mobile vehicles generated by the Project, but also due to the use of consumer products (such as cleaning supplies, kitchen aerosols, cosmetics, and toiletries) by residents of the Project site. Consumer products are known to generate ROG through off-gassing. Such increases in ROG could fuel potential increases in health effects due to exposure to ozone.

[14] As provided for the San Joaquin Valley for Year 2025, as prepared by Ramboll U.S. Consulting Inc. in their *Analysis of Potential Health Effects of Criteria Air Pollutant Emission Impacts, North Manteca Annexation #1 Project*, March 2023.

[15] Note: Although the Ramboll U.S. Consulting Inc. analysis for was prepared for a different project, the background health incidence rates are not project-specific. Rather, they are for the San Joaquin Valley as a whole for year 2025, and therefore are also provide a representative data snapshot for this project.

[16] See: https://www.ppic.org/blog/2020-census-counting-the-san-joaquin-valley/

Nevertheless, it should be noted that such exceedance of the ROG threshold would likely only occur at or near buildout of the Project site, rather than in the very earliest phases of Project operation, when only a proportion of the Project is built out. Moreover, this analysis does not consider potential future reductions in overall ROG off-gassing due to anticipated stricter consumer products regulations in the future. Additionally, ROG emissions are anticipated to be reduced over time with anticipated shifts to electric vehicles as a proportion of the overall mobile vehicle fleet over time. Furthermore, as shown in Table 3.3-10, health-related incidences associated with ozone are relatively low in the San Joaquin Valley, as a proportion of the overall population.

Particulate Matter

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, PM can cause major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis, and premature death. The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly, and children.

Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Studies show that every 1 microgram per cubic meter reduction in $PM_{2.5}$ results in a one percent reduction in mortality rate for individuals over 30 years old (Bay Area Air Quality Management District, 2017). Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis – and even premature death. Additionally, depending on its composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. EPA 2019c).

The Project would generate emissions of PM during Project operational activities, as shown in Table 3.3-8 and Table 3.3-9. Although the exact effects of such emissions on local health are not known, it is likely that the increases in PM generated by the proposed Project would be minimal, even for people with impaired respiratory systems, located in the immediate vicinity of the Project site. The increases of these pollutants generated by the proposed Project would not on their own generate an increase in the number of days exceeding the NAAQS or CAAQS standards. In addition, based on the nature of the Project and its size, such emissions when combined with the existing PM emitted regionally would have minimal health effect on people located in the immediate vicinity of the Project site.

UFPs are a subset of PM and represent a health concern. Such particles have been shown to have the potential for even greater health effects than PM_{10} or $PM_{2.5}$, due to their even smaller particle sizes. However, there are no adopted rules or regulations by the U.S. EPA or California air districts regarding UFPs. Moreover, attainment status related to UFPs is not monitored by the U.S. EPA or California air districts, and the SJVAPCD does not provide any guidance for assessment, thresholds,

or mitigation associated with UFPs. Additionally, air districts are not required to monitor UFPs. Nevertheless, funding for harm reduction and monitoring of UFPs is occurring throughout California. For example, the Bay Area Air Quality Management District (BAAQMD), a neighboring air district, established in 2011 a comprehensive program to study UFPs. As part of this program, the BAAQMD began making measurements at four air monitoring stations, with additional monitoring stations expected to be online in the future. At each station, the number of particles in a specified volume of air is counted every second. In addition to the number counts, sampling began in 2015 at two stations to gather data on UFP composition. Collected samples are analyzed for nineteen metals. Data obtained from these measurements is used to identify major UFP sources in the San Francisco Bay Area, and to evaluate models and refine estimates of UFP's public health impact.[17] Separately, the SJVAPCD provides grant funding for off-road engine projects through their grants and incentives programs, which reduce UFPs[18]; the U.S. EPA Pacific Southwest region has provided funding for both the South Coast Air Quality Management District and the SJVAPCD District to help spur early-stage, innovative technologies that need further testing and demonstration prior to massive deployment and commercialization of California Clean Air Initiative (CATI) projects.[19] Examples of such projects include Hybrid Natural Gas-Electric and Fully Electric Class 8 Trucks, Zero Emission Heavy-Duty Electric Trucks, Zero- and Near-Zero Emission School Buses, Electric Delivery Trucks, and School Bus Air Filtration. Other, numerous efforts are underway throughout the state to reduce PM emissions, which also tend to reduce emissions of UFPs (since UFPs are a subset of PM).

Different sources of PM generate differing levels of UFPs. For example, almost all the PM emitted by natural gas combustion is in the $PM_{0.1}$ size fraction, whereas this is only true for less than half of the PM emitted by gasoline and diesel fuel combustion.[20] Therefore, estimating $PM_{0.1}$ can be difficult, given that it is not incorporated into the modeling software recommended by the CARB and the California air districts (i.e. CalEEMod). Nevertheless, a numerical estimate of the Project's $PM_{0.1}$ is provided under Impact 3.3-4, based on assumptions provided in available literature.

Discussion

It is well documented from scientific studies that criteria pollutants can have adverse health effects. The federal and state governments have established the NAAQS or CAAQS as an attempt to regionally, and cumulatively, assess and control the health effects that criteria pollutants have within Air Basins. It is anticipated that public health will continue to be affected by the emission of criteria pollutants, especially by those with impaired respiratory systems in the City of Clovis and the surrounding region so long as the region does not attain the CAAQS or NAAQS. Many of the Project's criteria pollutant emissions are above the SJVAPCD's thresholds of significance, that were

[17] See: https://www.baaqmd.gov/about-air-quality/air-quality-measurement/special-air-monitoring-projects/special-reports/ultrafine-particulate-matter?sc_lang=en&switch_lang=true

[18] See: https://ww2.valleyair.org/grants/

[19] See: https://www.epa.gov/cati/california-clean-air-technology-initiative-cati-projects

[20] Venecek, M. A., Yu, X., and Kleeman, M. J.: Predicted ultrafine particulate matter source contribution across the continental United States during summertime air pollution events, Atmos. Chem. Phys., 19, 9399–9412, https://doi.org/10.5194/acp-19-9399-2019, 2019.

established to enable the Air Basin to achieve attainment for the NAAQS and CAAQS standards. As such, the Project emissions would be considered a cumulatively considerable contribution.

CONCLUSION

As shown in Table 3.3-9, the proposed Project's operational criteria pollutant would exceed the applicable SJVAPCD thresholds of significance for CO, NOx, ROG, and PM_{10}, even after accounting for the mitigation measures that are quantifiable at this time. This would also be true even after implementation of pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements. The Project would be required to implement Mitigation Measure 3.3-1 through Mitigation Measure 3.3-4. Therefore, the Project's criteria pollutant emissions would be considered to have a ***significant and unavoidable*** impact. Further, the analysis of criteria air pollutants is inherently cumulative and impacts also would be ***cumulatively considerable***.

MITIGATION MEASURES

Mitigation Measure 3.3-1: *The project shall utilize low-VOC paints, equivalent to 10 g/L of ROG, if commercially available.*

Mitigation Measure 3.3-2: *During Project operation, the Project applicant shall replace gas-powered landscape equipment with zero-emission landscape equipment, as feasible.*

Mitigation Measure 3.3-3: *The Project applicant shall install and utilize on-site solar panels as a renewable energy resource, such as on residential and/or other building rooftops within the Project site, to the extent feasible.*

Mitigation Measure 3.3-4*: Each future development phase shall be required to implement all relevant and feasible emission reduction measures to ensure that criteria pollutant emissions for the overall Vista Ranch Project are reduced or offset. This obligation can be achieved in a variety of ways, which may include compliance with Rule 9510 (Indirect Source Rule), implementation of SJVAPCD "Emission Reduction Clean Air Measures," or another method that can be shown to reduce or offset emissions. The obligation to reduce emissions may be achieved over time and incrementally in connection with discrete phases of development, and proportional to the share of emissions from the phase. The reductions can be achieved through a combination of on-site and/or off-site mitigation strategies. The following is a list of potential criteria pollutant mitigation strategies developed by the SJVAPCD (Emission Reduction Clean Air Measures, 2022) that could be implemented to reduce emissions. Each phase shall be evaluated to determine the relevance and feasibility of the measures listed below.*

- *Electric vehicle (EV) charging stations: Install and utilize electric vehicle (EV) charger(s) at the project site to promote the use of low or zero-emission vehicles.*
- *Clean Lawn and Garden Equipment: Installation of fueling infrastructure for compressed or liquid natural gas, or hydrogen fuel cell stations to promote the use of near-zero emission vehicles.*
- *Solar Panels: Install and utilize solar panels as a renewable energy source.*

- *Clean Residential Heating Devices: Install clean residential heating devices such as certified wood burning residential fireplaces and wood stoves, natural gas fireplace inserts, or electric heat pumps.*
- *Electric Outlets: This measure utilizes electrical outlets on the exterior of project buildings as necessary for sufficient powering of electric landscaping equipment.*
- *Increase Density of Land-Uses: This measure encourages the siting of development projects with increased densities to reduce vehicle miles traveled (VMT) emissions and improve walkability and transit ridership in the area. Density is usually measured in terms of persons, jobs, or dwellings per unit area. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose.*
- *Improve Walkability Design: This measure implements design elements into a development project that enhance walkability and connectivity. Improved street network characteristics within a neighborhood could include street accessibility, usually measured in terms of average block size, proportion of four-way intersections, or number of intersections per square mile. Examples of design implementation are sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of street trees, and a host of other physical variables that differentiate pedestrian oriented environments from auto-oriented environments.*
- *Improve Pedestrian Network: This measure provides a pedestrian access network to link areas of the project site to encourage people to walk instead of drive. This mode shift could result in people driving less and thus could result in a reduction in VMT. The project could provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site. The project could minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation could be eliminated.*
- *Provide Traffic Calming Measures: This measure is to provide traffic calming measures, which could encourage people to walk or bike instead of using a vehicle. This mode shift could result in a decrease in VMT. Project design could include pedestrian/bicycle safety and traffic calming measures more than jurisdiction requirements. Roadways could be designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips with traffic calming features. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts, or mini-circles, on street parking, planter strips with street trees, chicanes/chokers, and others.*
- *Neighborhood Electric Vehicle (NEV) Network: This measure creates local "light" vehicle networks, such as NEV networks. NEVs are classified in the California Vehicle Code as a "low speed vehicle". They are electric powered and must conform to applicable federal automobile safety standards. NEVs offer an alternative to traditional vehicle trips and can legally be used on roadways with speed limits of 35 MPH or less (unless specifically restricted). They are ideal for short trips up to 30 miles in length. To create an NEV network, the project will implement the necessary infrastructure, including NEV parking, charging facilities, striping, signage, and educational tools. NEV routes can be implemented throughout the project and can double as bicycle routes.*

- *Telecommuting and Alternative Work Schedule: This measure encourages telecommuting and alternative work schedules, which could reduce the number of commute trips. Alternative work schedules could take in the form of staggered starting times, flexible schedules, or compressed work weeks (e.g., 4/40, 9/80).*
- *Bicycle Enhancing Infrastructure: This measure utilizes various bicycle enhancing infrastructures to reduce VMT in the project area. Some of the infrastructure design elements used include: bikeways paths connecting to a bikeway system, secure bicycle parking, provides Class I and Class II bicycle parking/storage facilities on-site and/or employee lockers and showers. Bicycle parking facilities should be near destination points and easy to find. At least one bicycle parking space for every 20 vehicle parking spaces. It also provides Class I bicycle parking at apartment complexes or condos without garages and Class I or II bike lanes on arterial/collector streets, or where a suitable route exists.*
- *Speed Limit Signs and Erosion Control: This measure ensures speed limit signs are posted on unpaved roads limiting traffic to no more than 15 mph and ensures sandbags or other erosion control measures are installed to public roadways from sites with a slope greater than one percent. This measure should be implemented to reduce construction related PM10 impacts.*
- *Clean-Air Vehicle Parking: Labeling or signage limiting parking stalls for clean-air or electric vehicles only.*
- *Windblown Dust Reduction Strategies: These measures utilize the following design elements to minimize emissions from windblown dust during construction-related activities:*
  - *On-site water sprays or other dust suppression materials*
  - *Construct and maintain wind barriers sufficient to limit visible dust to 20% opacity on the construction site.*
  - *Suspend excavation and grading activity when winds exceed 20 mph on the construction site.*
- *Vehicle Idling Policy: This measure implements a Vehicle Idling Policy that requires all vehicles under company control to adhere to a 5-minute idling policy and/or to minimize the idling time (e.g., 5-minute maximum) for construction-related vehicles.*

Impact 3.3-2: Proposed Project construction activities have the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan. (Less than Significant)

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. Construction-related activities would result in Project-generated emissions from demolition, site preparation, grading, paving, building construction, and architectural coatings. CalEEMod™ (v.2022.1) was used to estimate construction emissions for the proposed Project. Table 3.3-11, below, provides the construction criteria pollutant emissions associated with implementation of the proposed Project.

TABLE 3.3-11: MAXIMUM CONSTRUCTION PROJECT GENERATED EMISSIONS (TONS PER YEAR)

POLLUTANT	*CO*	*NOX*	*ROG*	*SOX*	*PM_{10}*	*$PM_{2.5}$*
THRESHOLD	100	10	10	27	15	15
EMISSIONS	10.6	4.0	6.7	<0.1	2.0	1.0
EXCEEDS THRESHOLD?	**N**	**N**	**N**	**N**	**N**	**N**

SOURCES: CALEEMOD (V.2022.1)

NOTE: EMISSIONS AS SHOWN ABOVE INCLUDE THE EMISSIONS REDUCTIONS ASSOCIATED WITH THE DUST CONTROL PRACTICES, AS REQUIRED BY THE SJVAPCD.

If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for construction-generated emissions, the proposed Project will have a significant impact on air quality and conflict with the Clean Air Plan and all feasible mitigation are required to be implemented to reduce emissions. As shown in Table 3.3-11, Project maximum construction emissions would not exceed the SJVAPCD thresholds of significance for any criteria pollutants. Nevertheless, regardless of emission quantities, the SJVAPCD requires construction related control measures in accordance with their rules and regulations. Implementation of these control measures (provided in further detail below) would further reduce proposed Project construction related emissions to the extent possible.

The first step is to prepare a Dust Control Plan that meets all of the applicable requirements of APCD Rule 8021. All construction activities are required to implement dust control measures, as required by APCD Rules 8011-8081, to limit Visible Dust Emissions to 20% opacity or less. Dust control measures include application of water or chemical dust suppressants to unpaved roads and graded areas, covering or stabilization of transported bulk materials, prevention of carryout or trackout of soil materials to public roads, limiting the area subject to soil disturbance, construction of wind barriers, access restrictions to inactive sites as required by the applicable rules. The following dust control practices are identified in Tables 6-2 and 6-3 of the GAMAQI (2002):

a. *All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover.*
b. *All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.*
c. *All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall control fugitive dust emissions by application of water or by presoaking.*
d. *When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained.*
e. *All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.*

f. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
g. Limit traffic speeds on unpaved roads to 15 mph.
h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.

The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements, as well as implement the control measures provided by the SJVAPCD for construction-related PM_{10} emissions.

CONCLUSION

The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements. Moreover, the Project would not exceed the SJVAPCD's threshold of significance for construction-generated emissions. Therefore, the Project's criteria pollutant emissions would be considered to have a ***less than significant*** impact to this environmental topic.

Impact 3.3-3: The proposed Project could generate carbon monoxide hotspot impacts. (Less than Significant)

Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina (U.S. EPA, 2016). Such acute effects may occur under current ambient conditions for some sensitive individuals, while increases in ambient CO levels could increase the risk of such incidences.

The Project site is in a state attainment area and a federal unclassified/attainment area for carbon monoxide. Increases in proposed Project VMT would increase concentrations of carbon monoxide (CO) along streets and intersections that provide access to the Project site. Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources) and can form local elevated concentrations under specific conditions. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations (i.e., hotspots), therefore, are usually only found near areas of very high traffic volume and congestion.

Consider the CO "hot spot" analysis conducted by the South Coast Air Quality Management District (SCAQMD) for their request to the USEPA for resignation as a CO attainment area (SCAQMD 2003). In SCAQMD's analysis, they modeled the four (4) most congested intersections identified in their basin (South Coast Air Basin [SCAB]), which included the following:

- Long Beach Boulevard and Imperial Highway – proximity to the Lynwood monitoring station, which consistently records the highest 8-hour CO concentrations in the SCAB each year.

- Wilshire Boulevard and Veteran Avenue – the most congested intersection in Los Angeles County, with an average daily traffic volume of 100,000 vehicles/day.
- Highland Avenue and Sunset Boulevard – one of the most congested intersections in the City of Los Angeles.
- Century Boulevard and La Cienega Boulevard – one of the most congested intersections in the City of Los Angeles.

The SCAQMD's analysis found that these intersections had an average 7.7 ppm 1-hour CO concentrations predicted by the models, which is only 38.5% of the 1-hour CO CAAQS of 20 ppm. Therefore, even the most congested intersections in SCAQMD's air basin would not experience a CO "hot spot."

Several factors combine to make substantial concentrations of carbon monoxide unlikely. Existing physical constraints such as high-density, high-profile buildings or other obstructions that could prevent dispersion of carbon monoxide are largely absent. Predominant weather conditions in the area include air movement that would help facilitate carbon monoxide dispersion. Congested traffic conditions that otherwise could result in concentration of carbon monoxide would be of short duration. Further, under existing regulatory and legislative mandates, emissions volumes from all vehicle classes will continue to decline. Given these factors, substantial concentrations of carbon monoxide are not expected at or along any affected roadways or intersections. Finally, for the Project, there are no roadways/segments identified as deficient facilities under the worst-case traffic scenario that have an ADT greater than the 100,000 that was anticipated for the most congested intersection analyzed by SCAQMD and which still did not have a significant hotspot impact.[21]

CONCLUSION

This Project is in an area that is designated attainment and attainment/unclassified for carbon monoxide. Therefore, no Project-level conformity analysis is necessary for CO. Substantial concentrations of carbon monoxide are not expected at or along any streets or intersections affected by the development of the Project site. Therefore, there would be a ***less than significant*** impact related to the Project's potential to generate carbon monoxide hotspots.

Impact 3.3-4: The proposed Project has the potential for public exposure to toxic air contaminants. (Less than Significant)

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state

[21] See: California Department of Transportation (Caltrans), Traffic Volumes. 2017 Traffic Volumes : Route 99.

and federal governments have set ambient air quality standards.

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. EPA regulate 188 air toxics, also known as hazardous air pollutants. The U.S. EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources. In addition, the U.S. EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment. These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter.

The 2007 U.S. EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050. California maintains stricter standards for clean fuels and emissions compared to the national standards, therefore it is expected that MSAT trends in California will decrease consistent with or more than the U.S. EPA's national projections.

The California Air Resources Board (CARB) published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB, 2005) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial, and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source air toxics are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. Table 3.3-12 provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses.

TABLE 3.3-12: CARB MINIMUM SEPARATION RECOMMENDATIONS ON SITING SENSITIVE LAND USES

SOURCE CATEGORY	*ADVISORY RECOMMENDATIONS*
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation

SOURCE CATEGORY	*ADVISORY RECOMMENDATIONS*
	approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.

SOURCES: AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE" (CARB 2005)

Residences are proposed as part of the Project, which are considered traditional sensitive receptors. However, no residences would be located within 500 feet of a freeway, urban road with 100,000 vehicles/day or more, or a rural road with 50,000 vehicles/day or more. Additionally, under CEQA, an EIR need not analyze the impacts of the existing environment on the Project.

Virtually no residual TAC emissions and corresponding cancer risk are anticipated after Project construction. The proposed Project is not anticipated to generate any notable long-term, operational sources of TAC emissions because the proposed Project would only include residential land uses, light commercial uses, and public open space. The Project would not include heavy industrial uses or other land uses typically associated with stationary sources of TACs.

It should be noted that the mobile vehicles generated by the Project during operation would generate UFPs through vehicle emissions, braking, and tire wear. Like PM in general, (though generating even higher risk per unit than larger particle sizes) UFPs are notable for their potential to generate chronic risks associated with cardiovascular disease, potential long-term loss of long-function, and cancer. According to a recent study prepared for the European Geosciences Union, UFPs vary widely as a proportion of PM overall, depending on location; specifically, the $PM_{0.1}$ to $PM_{2.5}$ ratio analyzed in approximately 39 cities in the United States varied from approximately 1% to 16%.[22] These factors vary so widely because the sources of $PM_{0.1}$ vary substantially from city to city. For example, cities that are located close to substantial sources of natural gas combustion have higher $PM_{0.1}$ to $PM_{2.5}$ ratios, since almost all the PM emitted by natural gas combustion is in the $PM_{0.1}$ size fraction, whereas this is only true for less than half of the PM emitted by gasoline and

[22] Venecek, M. A., Yu, X., and Kleeman, M. J.: Predicted ultrafine particulate matter source contribution across the continental United States during summertime air pollution events, Atmos. Chem. Phys., 19, 9399–9412, https://doi.org/10.5194/acp-19-9399-2019, 2019.

diesel fuel combustion. Taken together, these facts support the potential importance of natural gas combustion for ambient $PM_{0.1}$ concentrations.

The city analyzed in the study with the greatest similarity to the City of Clovis (i.e. where the Project is located) was the City of Bakersfield, given its similarity in location within the Central Valley region. The ratio of $PM_{0.1}$ to $PM_{2.5}$ for Bakersfield was found to be approximately 11%. Absent data specific to the City of Clovis, this data is presumed to be the best available data and reasonable for use in estimating $PM_{0.1}$ levels in this case. Therefore, given the Project's estimated 11.3 tons per year of $PM_{2.5}$ (see Table 3.3-9), the total $PM_{0.1}$ generated by the Project is estimated to be approximately 1.24 tons per year (2,486 lbs/year). This is equivalent to 6.93 lbs/day of $PM_{0.1}$. While there is not specifically a numerical threshold of significance established by the SJVAPCD for $PM_{0.1}$, the quantity estimated is considered small relative to thresholds established for other particulate matter. From an incremental health perspective, this level of UFPs generated by the Project would not be substantial. As such, the Project would not result in substantial UFP emissions that may affect nearby receptors.

Further, the Project would not be exposed to substantial nearby sources of TACs. Since the proposed Project would not site land uses that would generate a significant risk of public exposure to TACs, the proposed Project would have a ***less than significant*** impact relative to this topic.

Impact 3.3-5: The proposed Project would not cause exposure to other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant)

The following text addresses odors. Other emissions (including criteria pollutants and TACs) are addressed in Impacts 3.3-1 through 3.3-4.

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the SJVAPCD. The general nuisance rule (Health and Safety Code §41700) is the basis for the threshold.

Examples of facilities that are known producers of odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant.

If a project proposes to locate receptors and known odor sources in proximity to each other, further analysis may be warranted. However, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The proposed Project does not include new industrial uses that are not already present in the vicinity of the Project site. Air district Rule 402 prohibits any mobile or stationary source generating an objectionable odor, except for odors emanating from certain agricultural operations. The California Health and Safety Code §41700 and Air District Rule 402 prohibit emissions of air contaminants from any source that cause nuisance or annoyance to a considerable number of people or that present a threat to public health or cause property damage. Compliance with these rules would preclude land uses proposed

under the proposed Project from emitting objectionable odors.

Odors would be potentially generated from vehicle and equipment exhaust emissions during construction of the Project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Furthermore, SJVAPCD Rule 4641 limits the amount of VOC emissions from cutback asphalt. Thus, any potential odors generated during asphalt paving would be regulated through mandatory compliance with SJVAPCD rules. Therefore, impacts associated with odors during construction would be less than significant.

Land uses that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project would not include land uses that generate odors during operation. Therefore, Project operations would result in odor impacts that are less than significant.

CONCLUSION

The proposed Project does not propose uses that would create new odors that would adversely affect substantial numbers of people. Construction odors would be temporary, limited by compliance with SJVAPCD rules, and would not affect a substantial number of people. Therefore, construction and operation of the proposed Project would not result in significant objectionable odors. Impacts associated with exposure to odors would be ***less than significant.***

This section describes biological resources at the Project site and in the Project region; provides an overview of regulations protecting biological resources; and evaluates the Project's potential to impact biological resources. It also identifies mitigation to avoid, reduce, or compensate for impacts found to be significant. Impacts within MPArea 1, where biological resources have been studied extensively and the nature of development is well constrained, are analyzed to the project level (See Figure 3.4-1). Impacts within MPArea 2 and the Non-Development Area are analyzed at a more general programmatic level, since less information is available for these areas and future development there has not been planned in detail.

Several comments regarding biological resources were received during the Notice of Preparation (NOP) comment period.

- A letter from the Center for Biological Diversity (December 15, 2023) identified that the EIR should disclose, analyze, and mitigate impacts to the following.
  - Wildlife movement and habitat connectivity, including impacts to riparian corridors
  - Special-status species, including California tiger salamander, tricolored blackbird, Crotch['s] bumble bee, giant garter snake, San Joaquin kit fox, "and many more"
- A letter from the California Department of Fish and Wildlife (CDFW) (December 4, 2023) noted that the project site is likely to provide suitable habitat for special-status species and is within the geographic range of multiple such species, including California tiger salamander, Swainson's hawk, tricolored blackbird, Crotch's bumble bee, western pond turtle, American badger, burrowing owl, and western spadefoot, and recommended that the results of biological technical studies conducted for the EIR be used to modify Project alternatives such that impacts on biological resources are avoided and minimized. The letter also recommended mitigation measures for impacts on these species and their habitat.

  Additional recommendations from the CDFW commenter included the following.
  - Protocol-level surveys for special-status plants should be conducted at the Project site
  - Proponents engaged in development within the Project area should obtain Incidental Take Permit(s) (ITPs) for California tiger salamander; ITPs may also be needed for other species if take cannot be avoided through mitigation measures
  - Early consultation with CDFW regarding mitigation for California tiger salamander habitat is advisable
  - Early consultation with the U.S. Fish and Wildlife Service (USFWS) regarding impacts on federally listed species, including vernal pool fairy shrimp, is also advisable
  - A Streambed Alteration Agreement may be needed for impacts on aquatic resources on the project site

  - Other topics that should be addressed in the EIR include: effects of outdoor artificial night lighting on wildlife; impacts on wildlife movement and habitat connectivity; and cumulative impacts on special-status species

- In February 2024, CDFW provided a second letter in response to the City's request for early consultation on the Vista Ranch Project General Plan Amendment. This letter references CDFW's previous comments on the NOP and emphasizes the need to include the prior mitigation recommendations in the Project CEQA document

All of the topics identified by NOP commenters are addressed in this section. The full text of their letters is provided in Appendix D.

METHODS

Information on the Project area's biological resources was drawn largely from studies of MPArea 1 conducted for project planning. Primary sources included the following (and included in Appendix B):

- A *Biological Resources Assessment for the Triangle Property* dated January 23, 2023 (revised) (ECORP Consulting 2023)

- A *Delineation of Potential Jurisdictional Aquatic Resources, Vista Ranch Project Site* dated August 17, 2023 (Vollmar Natural Lands Consulting 2023a), which was verified by the U.S. Army Corps of Engineers (Corps) in November 2023

- The Biological Assessment prepared to support Clean Water Act Section 404 permitting for development of MPArea 1 (Vollmar Natural Lands Consulting 2023b)

- Results of protocol-level rare plant surveys conducted in 2023 (Vollmar Natural Lands Consulting 2023c)

- Results of protocol-level dry season surveys for vernal pool branchiopods conducted in 2023 (Vollmar Natural Lands Consulting 2023d)

- Conceptual mitigation planning documentation for development of MPArea 1 entitled *Wilson Premier Homes-Vista Ranch, Mitigation Overview* (Redtail Consulting 2023)

- The draft Incidental Take Permit application currently being prepared for development of MPArea 1 (Redtail Consulting 2024)

These and additional sources of information are cited in the text.

For MPArea 2 and the Non-Development Area, detailed information on biological conditions in MPArea 1 was augmented by aerial photograph and field reconnaissance. No detailed biological studies have been conducted in these areas to date.

Impacts were analyzed consistent with prevailing practice in biological resources conservation and impact analysis. Within MPArea 1, where detailed information on the nature and footprint of future

development is available (see Section 2.0 Project Description]), analysis took this planning into account to enable project-level assessment. Within MPArea 2, which would also be subject to the Vista Ranch Master Development Plan (Wilson Premier Homes 2023) assuming the Project moves forward, analysis assumed development consistent with zoning laid out in the Plan but was necessarily programmatic since no details are available at this time. Within the Non-Development Area, analysis also assumed that some level of additional development is possible, but was again programmatic and generalized since no development planning is currently in place. Development in MPArea 2 and Non-Development Area, would likely require future project-level analysis prior to entitlement.

Mitigation—measures to avoid, reduce, and/or compensate for impacts—is identified for impacts found to be significant. Mitigation measures were also developed consistent with current prevailing practice in biological resources conservation, including resource agency guidance for the proposed Project and other recent undertakings in the region.

3.4.1 ENVIRONMENTAL SETTING

REGIONAL CONTEXT

The City of Clovis and the Project site lie in the southeast portion of California's Great Valley Geomorphic Province, an elongate trough bounded to the west by the Coast Ranges and to the east by the Sierra Nevada, and floored by a thick accumulation of alluvial sediments. The Great Valley lowland encompasses the Sacramento Valley to the north and the San Joaquin Valley to the south, and is drained by the Sacramento and San Joaquin River systems, which meet at the Sacramento – San Joaquin Delta to join San Francisco Bay (e.g., Norris and Webb 1990).

The U.S. Geological Survey considers the Great Valley trough a distinct ecozone, referred to as the Central California Valley ecoregion, and set apart from neighboring mountainous regions by its flat plains and a climate of long, hot, dry summers and mild winters. Historically, the Central Valley ecoregion supported extensive prairies, oak savannas, riparian woodlands, freshwater marshlands, and vernal pools, with desert grasslands present in the south. Currently, more than 50% of the region is croplands, most of which are irrigated (Griffith et al. 2016; see also Jepson Flora Project 2024).

The Project site is within the Southern Hardpan Terraces subregion of the Central California Valley ecoregion. Extending along the east margin of the San Joaquin Valley, this subregion is situated on gently sloping terraces, floodplains, and alluvial fans at elevations of 150 – 500 feet. Regional drainage is toward the San Joaquin River or closed basins within the San Joaquin Valley. Soil temperature regimes are thermic; soil moisture regimes are xeric to aridic. In undeveloped areas, characteristic vegetation includes annual grasslands, *Ceanothus* shrublands, and blue oak (*Quercus douglasii*) savannas, with scattered stands of foothill pine (*Pinus sabiniana*) in draws and on protected slopes. Vernal pools are also characteristic (Griffith et al. 2016).

Similar to the U.S. Geological Survey, UC Berkeley's Jepson Herbarium recognizes the Sacramento and San Joaquin Valleys as distinct floristic subregions within the Great Valley. The San Joaquin Valley subregion, where the City and Project site are located, is generally drier and warmer than the Sacramento Valley (Jepson Flora Project 2024). Over the last several decades, typical annual rainfall in the greater Fresno/Clovis area has been just under 11 inches, most of which falls between October

and April. Summer daytime temperatures can approach or exceed 100° F. Winter daytime temperatures are moderate at 55° – 70° F, with nights largely in the 40° – 50° F range (National Weather Service *n.d.*)

LOCAL SETTING

Habitat Conditions and Wildlife Use

HABITAT AND WILDLIFE IN MPAREA 1

Overview

MPArea 1 is bordered to the south and west by suburban residential development and to the northwest by more open rural residential development. To the northeast, the site abuts open rangeland and the Big Dry Creek Dam and Reservoir, which are flood control structures operated by the Fresno Metropolitan Flood Control District (FMFCD). The site is bisected by the Big Dry Creek Reservoir Outlet Works Channel (Outlet Channel) a constructed canal that conveys discharges from the Big Dry Creek Dam spillway. When the Reservoir was constructed, the natural Dry Creek drainage was re-routed into the reservoir basin; flow now exits via the spillway and is conveyed via the Outlet Channel to rejoin the Creek about 2,500 feet below the spillway. The truncated and abandoned channel of Dry Creek remains a conspicuous feature in the east-central portion of MPArea 1, but no longer conveys flow (Vollmar Natural Lands Consulting 2023a). The remnant Creek channel within MPArea 1 exhibits intermittent stream geomorphology but lacks an ordinary high water mark. It does not have hydric soils and supports only upland vegetation (Vollmar pers. comms., Vollmar Natural Lands Consulting 2023a).

The topography of MPArea 1 is level to gently rolling, with elevations ranging from about 380 to 413 feet above mean sea level. The most pronounced slopes are in the northwest portion of the area. Site soils appear to lack intact claypan or hardpan, which likely contributes to relatively rapid infiltration throughout much of the site, with a correspondingly low rate of wetland formation even within some depressional features (Vollmar Natural Lands Consulting 2023a).

The majority of MPArea 1 is non-native annual grassland and degraded pasture land (See Figure 3.4-2). The northeast and southeast portions of the site appear not to be grazed at present, and grasslands there support a mixture of primarily non-native annual grasses and herbs, including invasive weeds. Scattered depressional wetlands are present within the grasslands, especially along the northeast edge of MPArea 1, where they occupy a series of what appear to be remnant floodplain swales north of the abandoned Dry Creek channel and are apparently fed in part by seepage from the Big Dry Creek Reservoir in heavy rain years. Three created stockponds and small depressional wetlands are also present within the grasslands in the northwest portion of area (Vollmar Natural Lands Consulting 2023a).

The central portion of MPArea 1 was graded for flood irrigation several decades ago, although flood irrigation is not practiced at this time. This area is divided into several pastures with cross fencing and is at least intermittently used for grazing. It supports degraded pasture with ruderal vegetation dominated by non-native grasses and herbs including invasive weeds. Scattered rural/agricultural development features are also present. Current grazing use appears to be light, leading to build-up

of thatch and residual dry matter. A triangular pond located adjacent to the Outlet Channel was apparently constructed in uplands to capture and allow reuse of irrigation water although it also has a culverted connection to the Channel (Vollmar Natural Lands Consulting 2023a).

MPArea 1 is used by common wildlife species typical of the region, including species of grasslands and wetlands as well as urban-adapted species. Individuals or sign of the following species have been observed: coyote (*Canis latrans*), raccoon (*Procyon lotor*), Botta's pocket gopher (*Thomomys bottae*), Turkey Vulture (*Cathartes aura*), Red-tailed Hawk (*Buteo jamaicensis*), Mallard (*Anas platyrhynchos*), House Sparrow (*Passer domesticu*s), House Finch (*Haemorhous mexicanus*), western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), Pacific chorus frog (*Pseudacris regilla [P. sierra]*) western toad (*Bufo [Anaxyrus] boreas*), American bullfrog (*Rana catesbeiana* [*Lithobates catesbeianus*]), and other widespread generalists.

Aquatic Resources and Sensitive Natural Communities

A total of 3.053 acres of state- and federally jurisdictional waters[1] has been mapped on the Project site. Figure 3.4-3 provides an overview of the aquatic resources on the Project site, and Figure 3.4-3A through 3.4-3H provides details of individual aquatic resources on the Project site. This includes 1.646 acres of wetlands and 0.278 acre of other waters (canal/Outlet Channel) (Vollmar Natural Lands Consulting 2023a). The agricultural tailwater pond mentioned above (1.129 acres; Vollmar Natural Lands Consulting 2023a) is also being treated as a jurisdictional feature. Other than the delineated wetlands and other waters, no sensitive natural communities[2] are present within MPArea 1 (Vollmar Natural Lands Consulting 2023c).

HABITAT AND WILDLIFE IN MPAREA 2 AND NON-DEVELOPMENT AREA

Figure 3.4-2 provides the land cover types for the Project site, which illustates general habitat conditions in MPArea 2 and the Non-Development Area.

The south and southeast portions of MPArea 2 consist of former agricultural lands with scattered agricultural structures. Current uses of these parcels include orchard, tree nursery, horse paddock, and dry pasture/hay field. One parcel is presently under development as a mini-storage facility; this project has undergone CEQA review and been entitled by the County of Fresno.

The roughly triangular segment of MPArea 2 in the approximate center of the project area—surrounded on all sides by lands within MPArea 1—appears to have been cultivated in the past, but

[1] As noted above, the jurisdictional delineation for MPArea 1 was verified by the Corps in November 2023. All wetlands and other waters within MPArea 1 are presumed to be both state- and federally jurisdictional.

[2] *Sensitive natural communities* refers to vegetation types ranked S1 – S3 by CDFW's vegetation classification and mapping program, reflecting a comparatively high level of rarity and threat. In the Project region, they include communities such as Valley oak woodland and forest and various riparian and vernal pool habitats (California Department of Fish and Wildlife 2023a, 2024).

preserves rolling mima-like topography that may support local depressional wetlands and/or vernal pools in some areas. A portion of the abandoned Dry Creek channel is also preserved in this area.

The portion of the Non-Development Area west of MPArea 1 is dominated by suburban and semi-rural/rural development. Immediately abutting the west boundary of MPArea 1 are remnant agricultural lands, including open cultivated fields to the south, and grazing land and orchards to the north. Topography in this area is gently rolling and may support localized development of seasonal and/or vernal pool wetlands.

The portion of the Non-Development Area north of MPArea 1 consists of undeveloped grassland west of the Big Dry Creek Reservoir, which does not appear to have been cultivated. Topography in this area is also gently rolling and may support localized wetland development.

Similar to MPArea 1, MPArea 2 and the Non-Development Area are likely used by a variety of wildlife species typical of the region, depending on the current land use and conditions of the parcels. The more modified parcels in the south and east likely support primarily urban-adapted species such as House Sparrow, House Finch, Northern Mockingbird (*Mimus polyglottos*) and Rock Dove (*Columba livia*), with occasional visits from human-tolerant species such as coyote, as well as feral animals such as house cat (*Felis catus*). The undeveloped area to the north likely supports a wider range of native species adapted to grassland and vernal pools, such as Western Meadowlark (*Sturnella neglecta*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), Pacific chorus frog, and gopher snake (*Pituophis catenifer*).

Special-Status Species

Protocol-level rare plant surveys of MPArea 1 were conducted during the 2023 blooming season. No special-status plants were detected during the surveys (Vollmar Natural Lands Consulting 2023c), although a number of special-status plants have the potential to be present, as detailed in Table 3.4-1.[3] Figure 3.4-4 illustrates the CNDDB from a 12 quad search.

Detailed information on special-status plant occurrences in MPArea 2 and the Non-Development Area is not currently available, but the general likelihood of occurrence is considered similar to that for MPArea 1, with the caveat that MPArea 2 and much of the Non-Development Area are more developed and disturbed than MPArea 1; special-status plants may therefore be less likely to occur in these areas than in MPArea 1, although their presence cannot be ruled out without further assessment.

[3] A number of other special-status plants known from the Project region were also considered and are not expected to be present within MPArea 1, based on their distribution, habitat requirements, and/or elevation constraints (Vollmar Natural Lands Consulting 2023b).

TABLE 3.4-1. SPECIAL-STATUS PLANTS WITH POTENTIAL TO BE PRESENT IN MPAREA 1

SPECIES	STATUS (STATE/FED/CRPR)	HABITAT & BLOOMING PERIOD	POTENTIAL TO BE PRESENT
Brassy bryum *Bryum chryseum*	—/—/4.3	Oak woodlands, grasslands, chamise chaparral at elevations of 165 – 1,970 feet; no blooming period since this is not a flowering plant	**Low**. Grasslands in MPArea 1 may provide suitable habitat. CNDDB records no relevant occurrences
Hoover's calycadenia *Calycadenia hooveri*	—/—/1B.3	Foothill woodlands, valley grasslands, rocky exposed places, oak savannas at elevations of 328 – 1,312 feet; blooms Jul – Sep	**Low**. MPArea 1 does not offer suitable rocky habitat. Nearest documented occurrence (2007) is 9.8 miles away
Bristly sedge *Carex comosa*	—/—/2B.1	Lake margins and edges, freshwater wetlands, wetland and riparian areas at elevations below 1,312 feet; blooms May – Sep	**Low**. Mesic areas in MPArea 1 may provide suitable habitat but there are few occurrences in the vicinity; nearest documented occurrence (1989) is 32.4 miles away
Succulent owl's-clover *Castilleja campestris* ssp. *succulenta*	SE/FT/1B.1	Vernal pools, freshwater wetlands, foothill woodlands, valley grasslands, wetland and riparian areas at elevations below 2,460 feet; blooms Apr – May	**Low**. MPArea 1's seasonal wetlands may provide marginal habitat, but this species typically occurs in large vernal pools with high native richness and diversity, which are lacking from this site. Nearest documented occurrence (2008) is 3.1 miles away
California jewelflower *Caulanthus californicus*	SE/FE/1B.1	Shadescale scrub, valley grasslands, pinyon-juniper woodland, flats, slopes, non-alkaline grasslands at elevations of 230 – 2,381 feet; blooms Feb – May	**Low**. The only documented occurrence in the vicinity is 8.2 miles away and from the late 1890s or early 1900s
Ewan's larkspur *Delphinium hansenii* ssp. *ewanianum*	—/—/4.2	Foothill woodlands, valley grasslands, oak woodlands at elevations of 197 – 1,969 feet; blooms Mar – May	**Potential**. Grasslands in MPArea 1 may provide suitable habitat. Nearest occurrence is located in the U.S. Geological Survey Friant 7.5' quadrangle; exact location and date not available
Dwarf downingia *Downingia pusilla*	—/—/2B.2	Vernal pools, freshwater wetlands, foothill woodlands, valley grasslands, wetland and riparian areas, roadside ditches at elevations below 490 feet; blooms Mar – May	**Low**. MPArea 1 is just outside species' known geographic range, but seasonal wetlands and other mesic areas onsite may provide marginal habitat. Nearest documented occurrence (1979) is 4.2 miles away
Spiny-sepaled button-celery *Eryngium spinosepalum*	—/—/1B.2	Vernal pools, freshwater wetlands, valley grasslands, wetland and riparian areas, swales, roadside ditches at elevations below 4,167 feet; blooms Apr – May	**Potential**. Aquatic features onsite may provide suitable habitat. Nearest documented occurrence (2010) is 8.5 miles away
Boggs Lake hedge-hyssop *Gratiola heterosepala*	SE/—/1B.2	Lake margins, vernal pools, freshwater wetlands, wetland	**Low**. Aquatic features onsite may provide marginally suitable

SPECIES	*STATUS (STATE/FED/CRPR)*	*HABITAT & BLOOMING PERIOD*	*POTENTIAL TO BE PRESENT*
		and riparian areas, shallow waters at elevations below 5,249 feet; blooms Apr – Aug	habitat. Nearest documented occurrence (1994) is 13.6 miles away
Hogwallow starfish *Hesperevax caulescens*	—/—/4.2	Wetlands, foothill woodlands, valley grasslands, drying shrink-swell clays of vernal pools, flats, steep slopes at elevations below 984 feet; blooms Mar – Jun	**Low**. MPArea 1's seasonal wetlands may provide very marginal habitat. Nearest occurrences are extant, from Four Corners area near Madera
Forked hare-leaf *Lagophylla dichotoma*	—/—/1B.1	Foothill woodlands, valley grasslands, woodland openings woodlands at elevations of 50 – 1,312 feet; blooms Apr – Jun	**Potential**. Grasslands onsite may provide suitable habitat. Nearest documented occurrence (2010) is 10.8 miles away
Hoary navarretia *Navarretia eriocephala*	—/—/4.3	Foothill woodlands, valley grasslands, wetland and riparian areas, on heavy soils of seasonally wet flats at elevations below 1,312 feet; blooms May – Jun	**Low**. MPArea 1 is just outside species' known geographic range, but the seasonal wetlands and other mesic areas onsite may provide suitable habitat. Nearest occurrence is located in the U.S. Geological Survey Millerton Lake East 7.5' quadrangle; exact location and date not available
Pincushion navarretia *Navarretia myersii* ssp. *myersii*	—/—/1B.1	Vernal pools, freshwater wetlands, valley grasslands, wetland and riparian areas at elevations of 66 – 295 feet; blooms Apr – May	**Low**. MPArea 1 is just outside species' known geographic range, but seasonal wetlands onsite may provide suitable habitat. Nearest documented occurrence (2016) is 10 miles away
Adobe navarretia *Navarretia nigelliformis* ssp. *nigelliformis*	—/—/4.2	Wetlands; occasionally in non-wetland settings, vernal pools, clay depressions; at elevations of 33 – 3,281 feet; blooms Apr- Jun	**Low**. MPArea 1's seasonal wetlands may provide very marginal habitat. Nearest occurrences are extant, from the Four Corners area near Madera
San Joaquin Valley Orcutt grass *Orcuttia inaequalis*	SE/FT/1B.1	Vernal pools, freshwater wetlands, valley grasslands, wetland and riparian areas at elevations below 1,312 feet; blooms Apr – Sep	**Low *(assessment conservative due to species' status)***. MPArea 1's seasonal wetlands may provide very marginal habitat. Nearest document occurrence (1987) is 1.3 miles away
Hairy Orcutt grass *Orcuttia pilosa*	SE/FE/1B.1	Vernal pools, freshwater wetlands, valley grasslands, wetland and riparian areas at elevations below 656 feet; blooms May – Sep	**Low *(assessment conservative due to species' status)***. MPArea 1's seasonal wetlands may provide very marginal habitat. Nearest documented occurrence (2010) is 9.8 miles away
Wine-colored tufa moss *Plagiobryoides vinosula*	—/—/4.2	Usually on granitic rock or granitic soils along seeps and streams, sometimes on clays, at elevations of 100 – 5,695 feet; no blooming period since this is not a flowering plant	**Low**. MPArea 1 provides some areas with granitic soils, but they are not located along streams or seeps. Nearest occurrence is located in the U.S. Geological Survey Millerton Lake East 7.5'

SPECIES	*STATUS (STATE/FED/CRPR)*	*HABITAT & BLOOMING PERIOD*	*POTENTIAL TO BE PRESENT*
			quadrangle; exact location and date not available
Hartweg's golden sunburst *Pseudobahia bahiifolia*	SE/FE/1B.1	Foothill woodlands, valley grasslands, open woodlands, on clay soils, at elevations of 328 – 656 feet; blooms Mar – Apr	**Low *(assessment conservative due to species' status)***. Species is strongly associated with mima-mound topography on clay or volcanic soils, which are absent from MPArea 1. Nearest documented occurrence (2009) is 8.0 miles away and seen in 2009
San Joaquin adobe sunburst *Pseudobahia peirsonii*	SE/FT/1B.1	Foothill woodlands, valley grasslands, bare dark clays at elevations of 328 – 2,953 feet; blooms Mar - Apr	**Low *(assessment conservative due to species' status)***. Species is strongly associated with bare, dark clay soils, which are absent from MPArea 1. Nearest documented occurrence (2010) is 7.1 miles away
Sanford's arrowhead *Sagittaria sanfordii*	—/—/1B.2	Freshwater marshes, freshwater wetlands, riparian areas, ponds, ditches, at elevations below 984 feet; blooms May – Oct	**Low**. Stock ponds, tailwater pond, and Outlet Channel may provide marginal habitat. Nearest documented occurrence (2008) is 5.7 miles away
Greene's tuctoria *Tuctoria greenei*	CR/FE/1B.1	Vernal pools, freshwater wetlands, valley grasslands, wetland and riparian areas at elevations below 3,245 feet; bloom May – Jul	**Low *(assessment conservative due to species' status)***. MPArea 1's seasonal wetlands may provide very marginal habitat. Nearest documented occurrence (1987) is 1.8 miles away

Abbreviations:

CRPR = California Rare Plant Rank
FE = Federally listed as Endangered
FT = Federally listed as Threatened
SE = State-listed as Endangered
SR = State-designated as Rare
FP = State Fully Protected
SSC = CDFW Species of Special Concern
WL = CDFW Watch List species

CRPR Ranks:

1A = Plants presumed extinct in California and rare/extinct elsewhere
1B = Plants rare, threatened, or endangered in California and elsewhere
2A = Plants presumed extirpated in California, more common elsewhere
2B = Plants rare, threatened, or endangered in California, more common elsewhere
3 = Plants about which more information is needed
4 = Plants of limited distribution

CRPR Subranks:

.1 = seriously threatened in California
.2 = fairly threatened in California
.3 = not very threatened in California

Source: Vollmar Natural Lands Consulting 2023b

Several special-status wildlife species have been observed within MPArea 1 and are known to be present, as listed in Table 3.4-2.

TABLE 3.4-2. SPECIAL-STATUS WILDLIFE SPECIES KNOWN TO BE PRESENT IN MPAREA 1

SPECIES	*STATUS*	*HABITAT USE*
Crotch's bumble bee *Bombus crotchii*	—/SCE	Two individuals were observed foraging in MPArea 1 during species-specific surveys conducted in April 2024

SPECIES	*STATUS*	*HABITAT USE*
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	MPArea 1's seasonal wetlands provide suitable habitat for vernal pool fairy shrimp and may provide suitable habitat for midvalley fairy shrimp. Protocol-level dry season surveys conducted in 2023 found cysts belonging to the genus *Branchinecta*. Protocol-level wet season surveys conducted in early 2024 confirmed the presence of *B. lynchi*; *B. mesovallensis* may also be present but has not been confirmed to date
Midvalley fairy shrimp *Branchinecta mesovallensis*	—	
California linderiella *Linderiella occidentalis*	—	Seasonal wetlands and ponds in MPArea 1 provide suitable habitat, and species' presence was confirmed by protocol-level dry season surveys in 2023 and wet season surveys in 2024
California tiger salamander *Ambystoma californiense*	FT, ST	Species has been documented as breeding on the site and is expected to use upland habitats for dispersal and aestivation
Western spadefoot *Spea hammondii*	FC, SSC	Species has been documented as breeding onsite and is expected to use upland habitats for dispersal and aestivation
Cooper's Hawk *Accipiter cooperii*	WL	Has been observed foraging just offsite near Perrin Road, and MPArea 1 offers suitable nesting and foraging habitat; species is presumed to use MPArea 1

Key to Status Abbreviations:
FC = candidate for federal listing
FT = federally listed as threatened
SCE = candidate for state listing as endangered
ST = state-listed as threatened
SSC = state Species of Special Concern
FP = state Fully Protected species
WL = state Watch List species

Source: Vollmar Natural Lands Consulting 2023b, 2023d; Smith pers. comm.[a], pers. Comm. [b]

Numerous other special-status wildlife species have not been observed onsite at MPArea 1 but have at least some potential to be present, based on their documented range and the habitat the site offers. These are itemized in Table 3.4-3. Additional wildlife species known from the region were also considered but were evaluated as not expected to be present, either based on their known ranges, a lack of suitable habitat onsite, or both (Vollmar Natural Lands Consulting 2023b).

TABLE 3.4-3. ADDITIONAL SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO BE PRESENT IN MPAREA 1

SPECIES	**STATUS (FEDERAL/STATE)**	**HABITAT**	**POTENTIAL TO OCCUR**
INVERTEBRATES			
Monarch butterfly *Danaus plexippus*	FC/—	Found throughout most of North America in prairies, meadows, grasslands, and along roadsides	**Low**. No significant stands of milkweed (species' preferred host plant) have been observed in MPArea 1
Antioch efferian robber fly *Efferia antiochi*	—/—	Known only from Antioch, Fresno, and Scout Islands in San Joaquin River. Little is known about this species, but other robber flies are insect predators, and larvae usually	**Potential**. MPArea 1 is within species' range. Nearest documented occurrence (from 1935) is 11.2 miles away

SPECIES	STATUS (FEDERAL/STATE)	HABITAT	POTENTIAL TO OCCUR
		develop in the ground or in rotting wood	
Molestan blister beetle *Lytta molesta*	—/—	Known only from the Central Valley, ranging from Contra Costa south to Kern and Tulare Counties. Found in grasslands or chaparral habitat	**Potential**. MPArea 1 is within the species' range. Nearest documented occurrence (from 1980) is 12.7 miles away
AMPHIBIANS AND REPTILES			
Northern California legless lizard *Anniella pulchra*	—/SSC	Occurs in moist warm loose soil with plant cover, sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks	**Very Low**. Habitat in MPArea 1 is marginally suitable, and nearest documented occurrence (from 2000) is 43.0 miles away
Western pond turtle *Emys marmorata*	FC/SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches that offer abundant vegetation and either rocky or muddy bottoms, in woodland, forest, and grassland settings. In streams, prefers pools to shallower areas. Requires logs, rocks, cattail mats, and/or exposed banks for basking	**Potential**. MPArea 1 offers suitable habitat, and nearest documented occurrence (from 2016) is 0.8 mile away
Coast horned lizard *Phrynosoma blainvillii*	—/SSC	Inhabits open areas with sandy soil and low vegetation in valleys, foothills, and semiarid mountains. Found in a wide variety of setting, often near anthills where it feeds on ants	**Potential**. MPArea 1 offers suitable habitat. Nearest documented occurrence (from 2011) is 39.8 miles away
BIRDS			
Tricolored Blackbird *Agelaius tricolor*	—/ST, SSC	Nests in dense stands of cattail or tules in freshwater marshes; forages in fields, farmlands, pastures, and large open lawns	**Potential**. MPArea 1 offers suitable foraging habitat but lacks nesting habitat. Nearby Big Dry Creek Reservoir likely offers nesting opportunities. Nearest documented occurrence (from 1974) is 3.4 miles away
Golden Eagle *Aquila chrysaetos*	—/FP, WL	Requires open terrane; found in open mountains, foothills, and plains throughout much of North America. In the north and west, found over tundra, prairie, rangeland, or desert. Very wide-ranging in winter, more restricted to areas with good nest sites in summer	**Potential**. MPArea 1 offers suitable open foraging habitat but does not offer nesting opportunities. Nearest documented occurrence (from 1985) is 18.8 miles away
Burrowing Owl *Athene cunicularia*	SSC	Occurs in open grassland, prairies, farmland, airfields, and a variety of open areas within development. Favors areas of flat open ground	**Potential**. MPArea 1 offers suitable foraging habitat and nest burrow. Nearest

SPECIES	STATUS (FEDERAL/STATE)	HABITAT	POTENTIAL TO OCCUR
		with very short grass or bare soil; requires rodent burrows for nesting	documented occurrence (from 1990) is 8.2 miles away
Ferruginous Hawk *Buteo regalis*	—/WL	Found in dry open country: plains, prairies, grasslands, saltbush and greasewood flats, rangelands, deserts; in the winter, uses agricultural land	**Low**. MPArea 1 offers minimal nesting habitat, but may support suitable foraging habitat. Nearest occurrence (recently sighted) is in the Four Corners area near Madera
Swainson's Hawk *Buteo swainsoni*	—/ST	Found in plains, dry grasslands, farmlands, ranch country. Breeds most commonly on northern Great Plains, on prairie with scattered groves of trees for nesting. Less common in dry grassland farther west and in heavily farmed country. In migration, often pauses in fields where insect larvae have been turned up by cultivation	**Potential**. MPArea 1 offers suitable foraging and nesting habitat. Nearest documented occurrence (from 2017) is 16.3 miles away
California Horned Lark *Eremophila alpestris actia*	—/WL	Inhabits open ground, generally avoiding areas with trees or bushes. May occur in a wide variety of open settings: short-grass prairies, extensive lawns (e.g., airports, golf courses), plowed fields, stubble fields, beaches, lake flats, dry tundra	**Potential**. MPArea 1 provides suitable nesting and foraging habitat. Nearest documented occurrence (from 1992) is 7.0 miles away
Prairie Falcon *Falco mexicanus*	—/WL	Typically found in fairly dry open country, including grasslands open hills, plains, prairies, and deserts. Also, found in open country above tree line in high mountains. In winter, often found in farmland and around lakes and reservoirs	**Low.** MPArea 1 offers potential foraging habitat but no nesting habitat. Nearest documented occurrence (from 1985) is 10.9 miles away
California Condor *Gymnogyps californianus*	FE/SE	Prefers wild open country, rugged hills. Historically ranged over much of the west, from mountains and valleys to the coast, foraging over open grassland and savanna, and nesting forested mountainous terrain with steep cliffs	**Potential**. MPArea 1 offers suitable foraging habitat but lacks nesting habitat. Nearest documented occurrence (from 1976) is 61.8 miles away
Bald Eagle *Haliaeetus leucocephalus*	DL/SE, FP	Found along coasts, rivers, large lakes; in migration, also occurs in mountains and open country. Typically seen close to water where pretty is abundant, also locally in open dry country. Winters in some very dry western valleys.	**Low**. MPArea 1 offers marginal foraging habitat but no nesting habitat. Nearby Big Dry Creek Reservoir likely offers suitable foraging habitat during wet season. Nearest documented occurrence (from 2000) is 27.0 miles away
Loggerhead Shrike *Lanius ludovicianus*	—/SSC	Requires semi-open country with lookout posts such as wires, trees, and scrub; breeds in a wide range	**Potential**. MPArea 1 provides suitable nesting and foraging habitat. Nearest documented

SPECIES	STATUS (FEDERAL/STATE)	HABITAT	POTENTIAL TO OCCUR
		of open settings, from large clearings in wooded regions to open grassland or desert with a few scattered trees or large shrubs. In winter, may occupy treeless country if fences or wires provide hunting perches	occurrence (from 1992) is 71.0 miles away
MAMMALS			
Pallid bat *Antrozous pallidus*	—/SSC	Found in deserts, grasslands, oak forests, pine forests, scrub forest, farmlands. Roost in caves, rock crevices, mines, hollow trees, and buildings	**Potential**. Suitable roosting habitat is present in MPArea 1. Nearest documented occurrence (from 1979) is 18.0 miles away
Townsend's big-eared bat *Corynorhinus townsendii*	—/SSC	Found in conifer forests, mixed mesophytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitats; caves, mines, abandoned buildings, and under bridges	**Low**. Marginal roosting habitat present within the Impact Area. Nearest documented occurrence is 24.6 miles away and seen in 1946.
Western mastiff bat *Eumops perotis californicus*	—/SSC	Found in semi-arid to arid habitats, conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban settings. Roosts in cliff faces, high buildings, trees and tunnels	**Low**. Marginal roosting habitat is present in MPArea 1. Nearest documented occurrence (from 1958) is 11.7 miles away
Western red bat *Lasiurus blossevillii*	—/SSC	Prefers riparian habitats near water; roosts in sycamore, cottonwood, velvet ash, and elder trees	**Low**. Suitable roosting habitat is present in MPArea 1. Nearest documented occurrence is from the U.S. Geological Survey Millerton Lake West 7.5' quadrangle; exact location and date not available
Hoary bat *Lasiurus cinereus*	—/—	Found in deserts, dunes, savannas, grasslands, chaparral, forests, rainforests, scrub habitats. Prefers trees at the edges of openings	**Low**. MPArea 1 offers marginal habitat. Nearest documented occurrence (From 1915) is 18.1 miles away
San Joaquin long-tailed weasel *Mustela frenata xanthogenys*	—/—	Occurs in brushlands, open timber, brushy field borders, and grasslands along creeks and lakes	**Low**. MPArea 1 offers marginal habitat. Nearest documented occurrence is from the U.S. Geological Survey Fresno North 7.5' quadrangle; exact location and date not available
Yuma myotis *Myotis yumanensis*	—/—	Found in a wide variety of settings, from juniper and riparian woodlands to desert regions near open water. Roosts in caves, attics, buildings, mines, and underneath bridges and other similar structures	**Low**. MPArea 1 offers marginal habitat. Nearest documented occurrence (from 1999) is 30.6 miles away

SPECIES	STATUS (FEDERAL/STATE)	HABITAT	POTENTIAL TO OCCUR
American badger *Taxidea taxus*	—/SSC	Found in open areas, plains, prairies, farmlands, grasslands, edges of woods	**Potential**. MPArea 1 offers suitable habitat. Nearest documented occurrence (from 1987) is 6.8 miles away
San Joaquin kit fox *Vulpes macrotis mutica*	FE/ST	Found in grasslands and deserts of San Joaquin Valley and adjacent areas; prefers habitat with minimal vegetation	**Low**. MPArea 1 offers marginal habitat. Nearest documented occurrence (from 1990s) is 10.2 miles away

Abbreviations:

DL = federally delisted
FC = candidate for federal listing
FE = federally listed as endangered
SE = state-listed as endangered
ST = state-listed as threatened
SCE = candidate for state listing as endangered
FP = state Fully Protected species
SSC = state Species of Special Concern
WL = state Watch List species

Sources: Vollmar Natural Lands Consulting 2023b, Maners and Smith pers. comm., Smith pers. comm. 2024.

3.4.2 REGULATORY SETTING

The primary state regulatory agency with responsibility for plant, fish, and wildlife resources in California is the Department of Fish and Wildlife (CDFW). The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) have an indirect remit through their responsibility for the beneficial uses designated for Waters of the State, which may include functions such as wildlife migration and spawning habitat. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's Fisheries division (NOAA Fisheries, also referred to as the National Marine Fisheries Service or NMFS), also have an interest in the state's biological resources through their jurisdiction over federally listed species. In addition, other federal agencies such as the Corps are required to comply with the federal Endangered Species Act in exercising their separate responsibilities; they accomplish this by consulting on an interagency basis with USFWS and/or NOAA Fisheries, depending on the species involved.

The sections that follow briefly describe the federal, state, and local regulations that protect biological resources and will apply to the project.

FEDERAL

Federal Endangered Species Act

The federal Endangered Species Act, passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The Endangered

Species Act is administered by USFWS for terrestrial and freshwater species, and by NOAA Fisheries for marine and anadromous species.[4]

Listed species and those that have been proposed for listing ("candidate" species) are generally protected from unauthorized "take", defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife or attempting to engage in such conduct, including deleterious modification of habitat (16 USC §1532, 50 CFR §17.3). However, USFWS and NOAA Fisheries are empowered to authorized limited take that occurs as a result of otherwise legal project activities, referred to as "incidental take". Such authorization typically includes conditions required of the project proponent to protect affected species to the extent feasible while still allowing the project to proceed.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC §§703 – 712 *et seq*.) protects migratory birds, their nests, and their eggs. Pursuit, hunting, take, possession, sale, purchase, shipment, delivery, and export are all generally prohibited, although they may be authorized in certain limited circumstances—for example, for scientific collecting, falconry, education, rehabilitation, and migratory game bird propagation. The Act also establishes seasons and bag limits for game species. Knowing violation of the Act's provisions may constitute a felony; both misdemeanor and felony convictions under the Act are punishable by imprisonment or fines.

Bald and Golden Eagle Protection Act

The Federal Bald and Golden Eagle Protection Act (16 USC §§668 – 668[c]) protects Bald Eagles and Golden Eagles, their nests and eggs, and eagle products such as feathers from take, possession, sale, barter, transport, import, and export. Exceptions are allowed for traditional Native American cultural uses and for certain scientific activities. Violations are subject to heavy fines. Penalties increase for repeat offenders, and a second violation is automatically treated as a felony. State

Clean Water Act

The Clean Water Act (CWA) (33 USC §1251 *et seq*.) is the cornerstone federal law protecting the nation's surface waters. Because of the importance of waterways as habitat, CWA also indirectly protects the wildlife that depend on surface water resources.

CWA's basic premise is that there is no inherent right to discharge pollutants to waters under federal jurisdiction (e.g., U.S. Environmental Protection Agency Office of Wastewater Management 2012). Equally important, existing pollution does not authorize further discharge of pollutants; regardless of the condition of the receiving water, discharges must be treated such that they meet applicable standards must be treated. CWA thus protects water quality by regulating discharges federal

[4] *Anadromous* refers to species such as salmon that migrate between fresh- and saltwater habitats to complete different portions of their life cycles.

jurisdictional waters; discharges are illegal unless specifically authorized by permit, and even where permitted, the allowable volume may be limited and water quality standards must continue to be met. Key sections of the CWA from the perspective of biological and habitat resources include Section 404 (Permits for Dredged or Fill Material Placement), Section 401 (Water Quality Certification), and portions of Section 402 (Section 402 – National Pollutant Discharge Elimination System), discussed in the sections that follow.

CLEAN WATER ACT SECTION 404

Administered by the Corps, CWA Section 404 regulates the placement of "dredged and fill materials" into waters of the United States, including bodies of open water such as rivers, streams, lakes, and marine waters, as well as some wetlands. The Corps is empowered to issue permits for activities meeting criteria to ensure that degradation of function and value in jurisdictional waters is avoided if possible, and if it cannot be avoided, minimized and suitably compensated for. Because the terms "dredged and fill" are interpreted quite broadly in practice, Section 404 requires Corps permit authorization for a wide range of activities entailing temporary disturbance or permanent impact within federal jurisdiction limits—that is, below the ordinary high water mark in fresh water and below the mean higher high tide line in tidal waters.

CLEAN WATER ACT SECTION 401

Under CWA Section 401, projects that require federal authorization and have the potential to result in a "discharge"—again interpreted very broadly in practice—to federal jurisdictional waters must obtain certification that the discharge would not degrade water quality. All projects that require authorization under CWA Section 404 are automatically required to obtain Section 401 water quality certification. In California, the authority to issue Section 401 water quality certifications is delegated to the SWRCB, which in turn delegates responsibility to the RWQCBs.

CLEAN WATER ACT SECTION 402

CWA Section 402 established the National Pollutant Discharge Elimination System (NPDES), which regulates discharges from "point" (discrete or highly localized) sources such as wastewater treatment facilities, industrial facilities, and stormwater outfalls. Runoff from construction sites is also regulated under the NPDES program.

All point-source discharges to federal jurisdictional waters of must be authorized under an NPDES permit. Individual Permits are issued for a single facility, while General Permits cover multiple facilities or activities of the same type within a defined geographic area. CWA Section 402 is administered by the SWRCB and RWQCBs in California, like other sections of the CWA.

Under this authority, the SWRCB requires construction projects with a disturbance footprint of 1 acre or more, and smaller projects that are part of a larger undertaking disturbing 1 acre or more, to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit). One of the requirements for Construction General Permit coverage is preparation and implementation of a Storm Water Pollution Prevention

Plan (SWPPP) laying out the measures that will be used to control erosion and contain site runoff, and the monitoring that will be implemented to ensure that BMPs are operating effectively.

Since 2009, California has required that SWPPPs be prepared, amended, and certified by a Qualified SWPPP Developer (QSD), and implemented either by a QSD or a Qualified SWPPP Practitioner (QSP).

STATE

California Endangered Species Act

Originally enacted in 1970, subsequently repealed, and then replaced with an updated version in 1984, the California Endangered Species Act (CESA) (Fish and Game Code §§2050 – 2089) establishes the protection of at-risk species as a statewide priority. It lays specific protections for native plant, fish, and wildlife species that qualify as "threatened" or "endangered", and defines these terms for purposes of state regulation. Much like the federal Endangered Species Act, CESA prohibits unauthorized take of species that are listed, or are candidates for listing, as threatened or endangered. Also similar to the federal Act, CESA defines a procedure to authorize incidental take of listed species, subject to conditions. However, take cannot be authorized for species designated as Fully Protected under state law.

California Native Plant Protection Act

Enacted in 1977, the Native Plant Protection Act (Fish and Game Code §§1900 – 1913) established the designation "rare" for plants that may not currently be in danger of extinction but are present in small enough numbers that they could become so, and therefore merit protection. Amendments to CESA later replaced the usage of "rare" for at-risk fish and wildlife with "threatened" but did not change the use of "rare" for at-risk plants. As a result, there are now three categories for protected at-risk plants in California: rare, threatened, and endangered. Plants that have been formally listed as threatened or endangered are protected under CESA; importantly, those that are not CESA-listed but qualify as rare continue to be protected under the Native Plant Protection Act.

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act (Fish and Game Code §§2800 – 2835)—first signed into law 1991, superseded by an updated version in 2003, and subsequently amended multiple times—establishes a regional conservation planning process based on partnership between government, landowners, private industry, and public interest groups, referred to as the Natural Community Conservation Planning Program (NCCP). The NCCP provides a framework for development of conservation plans that cover large areas and offer protection to at-risk communities, habitats, and species at an ecosystem rather than species-specific scale. Over the long term this provides more effective protection than fragmented, small-scale mitigation at the project level. In addition, because planning takes regional development projections into account, the NCCP offers a streamlined mechanism for project approvals and an improved balance between conservation and land development. As of 2024, a total of 13 Natural Community Conservation Plans and 6 sub-area plans are in place statewide, with 6 more regional plans and another sub-area plan

in development (see https://wildlife.ca.gov/Conservation/Planning/NCCP/Plans). There is currently no Natural Community Conservation Plan in place for the Project area.

Additional Sections of California Fish & Game Code

Besides CESA and the Native Plant Protection Act, other portions of the California Fish and Game Code (FGC) provide important protection for native species and their habitats, as follows.

- **Protection of Nesting Birds.** FGC §3503 prohibits taking, possessing or needlessly destroying the nest or eggs of any bird, with certain limited exceptions
- **Protection of Birds of Prey.** FGC §3503.5 renders it illegal to take, possess, or destroy any bird belonging to the order Falconiformes or the order Strigiformes. Nests and eggs of birds in these orders are similarly protected
- **Take of Migratory Nongame Birds.** FGC §3513 stipulates that take and possession of species designated by the federal Migratory Bird Treat Act as "migratory nongame birds" may occur only in a manner consistent with the provisions of the Act or rules and regulations adopted under the Act
- **Fully Protected Species.** As noted above, take of Fully Protected species cannot be authorized under any circumstances. Fully Protected amphibian and reptile species are identified in FGC §505, birds in FGC §3511, and mammals in FGC §4700
- **Special Protection for Mountain Lions.** FGC §4800 designates the mountain lion (*Puma concolor*) as a "specially protected" mammal. Taking, injuring, possessing, transporting, importing, and selling mountain lions and their productes are misdemeanor offenses subject to fines and/or imprisonment. An exception to the prohibition on take and injury is made for demonstrable cases of self-defense or defense of others
- **Lake and Streambed Alteration.** Because of their value to the fish and wildlife that are CDFW's primary charge, FGC §§1600 – 1603 protect aquatic resources. In particular, §1602 prohibits unauthorized diversion, obstruction, and use of materials from the "bed, channel, or bank" of any river, stream, or lake, as well as deposition of material where it may enter a water body. Authorization of such activities requires formal notification to CDFW and entry in to a Lake or Streambed Alteration Agreement, which typically includes conditions to prevent undesirable effects on the water body itself as well as fish and wildlife in the project area. Under this authority, CDFW's jurisdiction over water bodies is construed as comprising the "bed and banks" of California water courses; it is three-dimensional, extending into the subsurface, and to activities above the watercourse itself. Again because of the emphasis protection of value to wildlife, it may also extend to encompass the width of the riparian corridor

California Native Plant Society Rare Plant Inventory

The California Native Plant Society (CNPS) (www.cnps.org) is a 501[c][3] non-profit organization with a mission to conserve California native plants and their habitats. CNPS maintains a routinely updated

inventory of the state's rare and endangered plants, and assigns them rankings based on the degree of threat they face. The California Rare Plant Ranks (CRPRs) are as follows (California Native Plant Society *n.d.*).

- Rank 1A: plants believed to be extinct, or at least extirpated from California
- Rank 1B: plants that are rare throughout their range
- Rank 2A: plants that are presumed to be extirpated from California, but are more common elsewhere in their range
- Rank 2B: plants that would qualify for Rank 1B based on their status in California, but are more common outside the state
- Rank 3: "review list" plants about which more information is needed to assess their status accurately
- Rank 4: "watch list" plants of limited distribution, which should be monitored regularly

Plants assigned to CNPS Ranks 1A, 1B, 2A, and 2B are presumed to qualify for listing under CESA; many of those assigned to Rank 3 also qualify (California Native Plant Society *n.d.*).

"Threat ranks" are appended to the primary CRPR to provide more information, as follows (California Native Plant Society *n.d.*).

- 0.1: seriously threatened in California
- 0.2: moderately threatened in California
- 0.3: not very threatened in California

For example, a species assigned CRPR 4.3 has limited distribution but is subject to a low degree of threat; a species assigned CRPR 1B.1 is rare throughout its range and is under significant threat.

California Wetlands Protection Policy

In August 1993, then-Governor Pete Wilson signed California Executive Order (EO) W-59-93, establishing a statewide policy for wetlands protection and priorities for the way state agencies implement their responsibilities relative to wetlands regulation. EO W-59-93 includes the objective of "ensur[ing] no overall net loss and long-term gain in the quantity, quality, and permanence of wetlands acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property" (Executive Order W-59-93 §II.1). EO W-59-93 encourages reducing the complexity of administering state and federal wetland conservation programs and "partnerships to make … cooperative planning efforts [a] primary focus of wetlands conservation" (Executive Order W-59-93 §II.3).

All state agencies are charged with conducting their activities in a manner consistent with EO W-59-93 objectives. The no net loss/long-term net gain policy is particularly important because of the way

it influences state permitting of wetland impacts and compensatory mitigation requirements for those impacts.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (California Water Code Division 7) established the SWRCB as a division of the California Environmental Protection Agency (Cal-EPA) and charged it with developing and adopting statewide policies for water quality protection (California Water Code §13140). The Porter-Cologne Act also divided the state into nine hydrologic regions, each under the jurisdiction of an RWQCB.

Among each RWQCB's key responsibilities is the development and implementation of water quality control plans (basin plans) for the major surface water bodies and groundwater basins within its region (California Water Code §13240). This includes formally designating the *beneficial uses* of the region's principal waters and the water quality objectives (WQOs) needed to protect them. Beneficial uses represent the resources and services provided by an aquatic system—that is, the reasons why the water body is valuable, either ecologically or to society. WQOs, which may be numerical (quantitative) or narrative (descriptive), define the level of water quality needed to ensure that a water body continues to satisfy its designated beneficial uses.

Designated beneficial uses may include biologically important services and functions such as

- wildlife habitat,
- spawning, reproduction, or early development habitat,
- warm or cold freshwater habitat,
- rare threatened or endangered species habitat,
- migration of aquatic organisms, and
- preservation of biological habitats of special significance

The Project site is under the jurisdiction of the Central Valley RWQCB and is subject to the Water Quality Control Plan for the Tulare Lake Basin (Central Valley Regional Water Quality Control Board 2018).

LOCAL

City of Clovis General Plan

The City General Plan (City of Clovis 2014) identifies the following guiding principle for natural resources.

- Foster stewardship as a primary means of conserving and enhancing natural resources, and promoting connections to the Sierra

Consistent with this principle, the General Plan includes several goals and policies that are either directly or indirectly relevant to the protection of biological resources and natural values, summarized in Table 3.4-4.

TABLE 3.4-4. RELEVANT GOALS AND POLICIES BY GENERAL PLAN ELEMENT

ELEMENT	*GOAL*	*POLICY*
Land Use	**6:** A city that grows and develops in a manner that implements its vision, sustains the integrity of its guiding principles, and requires few and infrequent amendments to the General Plan.	**6.2 Smart growth.** G. Preserve Open space…natural beauty, and critical environmental areas. L. Support actions that encourage environmental resource management.
Open Space and Conservation	**2:** Natural, agricultural, and historic resources that are preserved and promoted as key features for civic pride and identity.	**2.1 Stewardship.** Promote responsible planning and management of land and resources among property owners.
		2.6 Biological resources. Support the protection of biological resources through the conservation of high quality habitat area.
		2.7 Native plants. Encourage the use of native and climate-appropriate plant species and prohibit the use of plant species known to be invasive.

Source: City of Clovis 2014

City of Clovis Municipal Code

TREE PROTECTION STANDARDS

Municipal Code Chapter 9.30 (Tree Protection Standards) recognizes the aesthetic and environmental importance of the City's trees.

Per Municipal Code 9.30.030, the following are considered protected trees that may not be removed without permit authorization from the City.

- Heritage trees, defined in Municipal Code 9.120 as "[a]ny tree…designated by the Protected Tree Advisory Committee based on the finding that the tree has character, significant age and girth, interest or value as part of the development of and/or exemplification of the agricultural, cultural, economic, educational, social, indigenous or historical heritage of the City and identified on the historic resources inventory"
- Trees that were planted or retained in place as a condition of approval for a development application or building permit
- Multi-trunk trees that have at least one trunk 12 inches or more in diameter or 38 inches or more in circumference, measured 4 feet above grade
- Trees 12 inches or more in diameter or 38 inches or more in circumference, measured 4 feet above grade
- Parkway trees and trees located on public property
- Trees required by or memorialized by site plan review

Replacement trees may be required if a tree removal permit is issued (Municipal Code 9.30.090). In some cases, this will require a replanting plan subject to City review approval (Municipal Code 9.30.090.B). Maintenance of replacement trees is regulated under Municipal Code 9.28.090.

There are exemptions to the permit requirement in certain situations. Trees that pose an immediate threat to persons or property during an emergency, or are determined to constitute an emergency, may be removed without a permit on order of the Planning Director, the Public Utilities Director, or any member of the Police or Fire Department (Municipal Code 9.30.050.A). Trees declared to be public nuisances by the Building Official, the Fire Chief, or the Public Utilities Director may also be removed without a permit (Municipal Code 9.30.050.B)., as may trees that undermine or impact the safe operation of public utilities (Municipal Code 9.30.050.C). Exemptions also apply for removal of fruit trees (Municipal Code 9.30.050.D), eucalyptus trees (Municipal Code 9.30.050.E), and—unless they fall into one of the protected tree classes—trees on developed single-family residential properties (Municipal Code 9.30.050.F).

Lighting Standards

The City regulates lighting in existing and new development is also regulated under the Municipal Code. With the important exception of street lighting, sign illumination, and traffic safety lighting, light sources must be shielded such that illumination is shed onto the subject parcel only (Municipal Code 9.22.050[C]. Additionally, Municipal Code 9.22.050[A]

- limits light sources to 150 watts or equivalent
- prohibits light sources that directly illuminate or are visible from adjacent properties
- sets a limit of 0.5 foot-candle (~5.4 lux) for indirect illumination of adjacent properties
- limits the intensity of lighting internal to areas that require it to maximum of 7 foot-candles (~75.3 lux)

The Municipal Code does not limit the types of lighting sources that may be used.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on biological resources if it will:

- 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;

- 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;
- 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 sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan

IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: The proposed Project has the potential to result in adverse effects on special-status species and their habitat (Less than Significant with Mitigation)

EFFECTS IN MPAREA 1

Special-Status Plants

Numerous special-status plants are known from the Project region, and some of these have at least some potential to be present within MPArea 1, based on existing site conditions (Vollmar Natural Lands Consulting 2023a). None of the species is considered likely to be present, due to the disturbed conditions and generally low habitat quality on the site. Those with the highest potential are:

- Ewan's larkspur (*Delphinium hansenii* ssp. *ewanianum*) (CRPR 4.2)
- Spiny-sepaled button-celery (*Eryngium spinosepalum*) (CRPR 1B.2)
- Forked hare-leaf (*Lagophylla dichotoma*) (CRPR 1B.1)

An additional 20 species are considered very unlikely to be present (again, based on existing site conditions) but cannot be entirely ruled out of consideration. Of greatest concern are the state- and/or federally listed species:

- Succulent owl's-clover (*Castilleja campestris* ssp. *succulenta*) (state-listed as endangered, federally listed as threatened, CRPR 1B.1)
- California jewelflower (*Caulanthus californicus*) (state-listed as endangered, federally listed as threatened, CRPR 1B.1)
- Boggs Lake hedge-hyssop (*Gratiola heterosepala*) (state-listed as endangered, no federal status, CRPR 1B.2)
- San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*) (state-listed as endangered, federally listed as threatened, CRPR 1B.1)

- Hairy Orcutt grass (*O. pilosa*) (state and federally listed as endangered, CRPR 1B.1)
- Hartweg's golden sunburst (*Pseudobahia bahiifolia*) (state- and federally listed as endangered, CRPR 1B.1)
- San Joaquin adobe sunburst (*P. peirsonii*) (state-listed as endangered, federally listed as threatened, CRPR 1B.1)
- Greene's tuctoria (*Tuctoria greenei*) (state-designated as rare, federally listed as endangered, CRPR 1B.1)

Additional species that cannot be entirely ruled out have no state or federal listing status but qualify as rare. These include several species assigned to CRPR 1 or 2, reflecting a high conservation priority.

- Brassy bryum (*Bryum chryseum*) (CRPR 4.3)
- Hoover's calycadenia (*Calycadenia hooveri*) (CRPR 1B.3)
- Bristly sedge (*Carex comosa*) (CRPR 2B.1)
- Dwarf downingia (*Downingia pusilla*) (CRPR 2B.2)
- Hogwallow starfish (*Hesperevax caulescens*) (CRPR 4.2)
- Hoary navarretia (*Navarretia eriocephala*) (CRPR 4.3)
- Pincushion navarretia (*N. myersii* ssp. *myersii*) (CRPR 1B.1)
- Adobe navarretia (*N. nigelliformis* ssp. *nigelliformis*) (CRPR 4.2)
- Wine-colored tufa moss (*Plagiobryoides vinosula*) (CRPR 4.2)
- Sanford's arrowhead (*Sagittaria sanfordii*) (CRPR 1B.2)

Protocol-level rare plant surveys were conducted during the 2023 blooming period. None of the species listed above—and no other special-status plants—were observed. Weather conditions were particularly good in 2023, with ample late rainfall; any plants present should have been detectable during the surveys. It is therefore considered very unlikely that clearing and grading for initial development in MPArea 1 would result in removal of special-status plant occurrences.

However, plant occurrences can vary from year to year. There is thus some possibility that special-status plants that were not detectable in 2023 could occur in subsequent years, although—as noted above—MPArea 1 is in a fairly disturbed condition and does not offer particularly hospitable conditions for special-status plants. Removal of special-status plants could constitute an impact rising to a level considered significant under CEQA. To address this, the City will require implementation of Mitigation Measure 3.4-1. This measure requires avoidance of special-status plants where possible, and transplantation or replanting to a suitable offsite location if avoidance is not possible. Relocated populations will be subject to monitoring and corrective action—such as supplemental plantings—to support their survival, such that populations are not substantively decreased. This would reduce impacts consistent with prevailing practice for botanical resources conservation. Residual impacts, if any, are accordingly considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-1: *If ground disturbance on any project phase or sub-phase occurs after 2025, the applicant will retain a qualified biologist/botanist who is familiar with the rare plants of the project region to conduct an additional round of protocol-level rare plant surveys. Surveys will be conducted consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (California Department of Fish and Wildlife 2018) or most current equivalent.*

Surveys will be conducted prior to construction, with enough lead time to allow for consultation with CDFW (and, if appropriate, USFWS) and additional follow-up actions, if they are warranted. Surveys will be conducted during the peak blooming periods of the target species and will cover all potentially suitable habitats within the project site.

If no special-status plants are documented within the area to be disturbed for project construction (including staging and access), no further action is required.

If any listed plant species, or any plant species assigned to CRPR 1 or 2, is found to be present, the following measures will be implemented, at a minimum. With prior written approval from CDFW—and, if federally listed species are involved, USFWS—equally protective measures may be substituted. The applicant will be responsible for implementing all measures.

- *The occurrence(s) will be avoided and protected in place whenever it is possible to do so*
- *If the occurrence(s) cannot be entirely avoided, a Plant Salvage and Mitigation Plan will be prepared and implemented. The Plan will be prepared by a qualified biologist/botanist who is familiar with the rare plants of the project region and has experience conducting rare plant salvage operations. The plan will be subject to CDFW (and, if federally listed species are involved, USFWS) approval, and will, at a minimum, include the following*
  - *Quantity and species of plants to be planted or transplanted*
  - *Location of the mitigation/transplant site(s), which will be suitable to the species involved and within the species' known geographic range(s)*
  - *Salvage methods, such as relocation/transplantation, seed collection, etc., including storage locations and methods to preserve the plants*
  - *Procedures for propagating collected seed, including storage methods*
  - *Planting procedures, including any use of soil preparation and irrigation*
  - *Schedule and action plan to maintain and monitor the mitigation/transplant site for a minimum 3-year period following transplantation*
  - *Interim and final success criteria and corrective action thresholds, including growth, plant cover, and minimum survivorship of the transplanted species*

- *Corrective actions/contingency measures in the event interim success criteria are not being met (e.g., weed removal, supplemental irrigation, supplemental plantings, etc.)*
- *Reporting requirements and procedures, including the contents of annual progress reports, report submittals, review/approval responsibilities, etc.*

The Plan will be implemented under the oversight of the biologist/botanist who prepared it or another individual with equivalent qualifications.

Special-Status Wildlife

As itemized in Table 3.4-2, several special-status wildlife species are known to be present in MPArea 1:

- Crotch's bumble bee (*Bombus crotchii*)
- Vernal pool fairy shrimp (*Branchinecta lynchi)* and possibly also mid-valley fairy shrimp (*B. mesovallensis*)
- California linderiella (*Linderiella occidentalis*)
- California tiger salamander (*Ambystoma californiense*)
- western spadefoot (*Spea hammondii*)
- Cooper's Hawk (*Accipiter cooperii*)

A number of others are considered to have at least some potential to be present, based on known species ranges and existing conditions at MPArea 1 (Table 3.4-3).

In addition to these species, MPArea 1 offers suitable nesting habitat for multiple common species protected under the federal Migratory Bird Treaty Act; as discussed in *Regulatory Setting* above, nesting birds of all native species are also protected under the California Fish and Game Code.

The applicant proposing development of MPArea 1 is applying to CDFW for a state Incidental Take Permit (ITP) covering impacts on state-listed and candidate species. The ITP is expected to prescribe Avoidance and Minimization Measures (AMMs) to reduce the potential for direct take of individuals, and to require mitigation for losses of habitat. Additionally, because development of MPArea 1 would involve fill of state- and federally jurisdictional wetlands, the Vista Ranch project would require permit authorization from the Corps and other resource agencies (discussed in more detail in Impact 3.4-3 below) and the applicant has begun the permitting process. As part of their permit review, in November 2023 the Corps initiated formal consultation with USFWS regarding impacts on federally listed species, which is expected to result in issuance of a federal Biological Opinion (BO) that includes AMMs and/or habitat mitigation required for these species during MPArea 1 development. These will become part of the applicant's responsibilities under their Clean Water Act Section 404 permit from the Corps. Execution of CDFW-required AMMs and USFWS-required conditions will be enforced by CDFW and the Corps.

The following paragraphs discuss impacts on the species expected to be covered by the state ITP and/or federal BO and thus subject to state and/or federal permit condition requirements:

- California tiger salamander (hereafter, CTS)
- San Joaquin kit fox (hereafter, SJKF)
- Crotch's bumble bee
- Vernal pool fairy shrimp (hereafter, VPFS)
- Western spadefoot
- Western pond turtle

Impacts on additional special-status wildlife species are discussed after permit-covered species, beginning on page 3.4-45. These include:

- California linderiella, which is known to be present on the site but is not state- or federally listed and therefore will not be covered under the state ITP or federal BO
- Other special-status wildlife species that are considered unlikely to be present and are not expected to be covered under the state ITP or federal BO
- Nesting birds and birds that are otherwise protected, including but not limited to species that qualify for various forms of special status
- Swainson's Hawk (Buteo swainsonii) (state-listed as Threatened, no federal status), for which take is expected to be avoided and take coverage is not being sought

Species Covered by State and Federal Permit Conditions. The MPArea 1 applicant has applied for state ITP coverage for three species: CTS (state- and federally listed as threatened), SJKF (state-listed as threatened, federally listed as endangered), and Crotch's bumble bee (candidate for state listing as endangered, no federal status). The Corps' consultation with USFWS is expected to include CTS and VPFS (both federally listed as threatened) along with western pond turtle and western spadefoot (both of which are proposed for federal listing as threatened). The Corps has recently indicated that they are removing SJKF from their interagency consultation request based on reexamination of available information and discussion with USFWS, which led them to conclude that the species is not present in the area (Barnes pers. comms.). CDFW has not yet indicated how they intend to treat SJKF for the project.

Impacts on California Tiger Salamander. CTS is known to be present and breeding in multiple wetlands within MPArea 1. It is also presumed to use uplands in MPArea 1 for dispersal and aestivation (e.g., Vollmar Natural Lands Consulting 2023a). There would thus be potential for direct injury and mortality of CTS during progressive construction of new development within MPArea 1. Such impacts could rise to a level considered significant under CEQA if they are extensive enough to put local population survival at risk. To address this, the City will require implementation of the following mitigation measures. With these measures in place, construction-period impacts related to direct take of CTS would be reduced consistent with current best conservation practices, under the oversight of both CDFW and USFWS. Residual impacts, if any, are accordingly considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-2: *The applicant will require all construction personnel to undergo Worker Awareness Training that provides information on*

- *the sensitive habitats on the project site*
- *special-status species known and potentially present on the site, including their*
  - *listing status and causes of decline*
  - *habitat preferences*
  - *distinguishing physical characteristics*
- *the measures (AMMs, permit conditions, and CEQA mitigation) required to protect sensitive habitats and special-status species, including avoidance of delineated exclusion areas, and next steps and notifications in the event of a special-status species sighting*

The training will include a hard copy handout that summarizes the information presented and includes photographs of habitat resources and species to facilitate identification in the field by construction personnel. A readily available copy of the AMMs, permit conditions, and CEQA mitigation will be maintained by the construction foreman on the construction site for reference.

The applicant will ensure that all construction personnel undergo Worker Awareness Training before beginning work on the site. Training will be delivered by a qualified biologist experienced in the Fresno County/San Joaquin Valley area, and will be provided bilingually in English and Spanish if appropriate. Upon completion of training, employees will sign a form stating that they attended the training and understand all of the required CEQA mitigation and permit conditions. Signed forms will be submitted to CDFW and USFWS.

Mitigation Measure 3.4-3: *The MPArea 1 applicant will complete the state ITP and Clean Water Act Section 404 permitting processes and will obtain the necessary permits from CDFW and the Corps. The applicant will then be responsible for implementing all permit conditions relative to California tiger salamander (CTS), including AMMs and habitat compensation. Purchase of mitigation Property, establishment of the necessary conservation easements, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.*

The following measures will be required. If, via the state ITP process or the federal interagency consultation process, CDFW and/or USFWS issue alternate requirements that would be equally or more protective, those will be substituted.

- *The applicant will develop a CTS Relocation Plan, prepared by a qualified biologist and subject to approval by CDFW and USFWS. The Relocation Plan will include specific areas to which the designated qualified biologist may relocate individual CTS that are at risk from project-related activities. It will also include provisions for the biologist to monitor the*

translocated animal until it is determined that it is not at risk from predators or other factors. CTS will be relocated to appropriate habitat for their stage in the life cycle; for example, CTS found in burrows will be relocated to burrows and not to aquatic habitat

- *If a known or potential CTS individual is encountered during any project-related activity, the following requirements will apply.*
  - *All work that could result in direct injury or disturbance of the individual animal will cease immediately*
  - *The foreman and on-call biologist will be notified immediately*
  - *The biologist will take appropriate action to secure the individual (relocation per the Relocation Plan, and/or veterinary care if appropriate), and will then notify CDFW, USFWS, and the applicant via telephone or email*

  The applicant will appoint a representative to act as the contact for the biologist, to receive notifications of CTS encounters. The representative will be identified during the Worker Awareness Training program, and their name and contact information will be provided to CDFW and USFWS

- *An Herbicide Use Plan will be drawn up prior to the onset of development activities, and will be subject to CDFW and USFWS approval before work on each phase begins. The plan will allow no more than two applications of herbicide per year during development activities. Herbicides will be used only in a manner that avoids primary or secondary poisoning of CTS and the prey populations on which they depend within the phase footprint. All uses of such compounds will comply with label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other appropriate state and federal regulations, as well as any other additional project-specific restrictions required by CDFW and/or USFWS*

- *Prior to ground disturbance for each phase or sub-phase (defined as major earthwork associated with rough grading, lot leveling, infrastructure construction, and street improvements; not including construction of individual homes on previously graded pads), the disturbance areas will be subject to the following measures to protect CTS. These measures will be in force for the duration of ground-disturbing activities, under the oversight of a qualified biologist. After the completion of initial ground-disturbing activities for each phase or sub-phase, the qualified biologist will continue to be available by phone and will be on call to visit the project site as needed throughout phase construction. The biologist's contact information will be provided to CDFW and USFWS*
  - *First, individual sub-phases or disturbance areas will be identified within each project phase. Sub-phases will be defined with the input of a qualified biologist such that no undisturbed areas of potential CTS habitat are surrounded or cut off from other CTS habitat as a result of ground disturbance and/or implementation of other AMMs such as wetland exclusion areas. Instead, sub-phases will be developed such that the*

most direct route from any given patch of potential CTS habitat onsite to the nearest accessible offsite CTS habitat remains open until the onsite patch has been subject to relocation measures, described below. Multiple, or even all, sub-phases may be active concurrently, but no portion of the project or phase site will be disturbed until after CTS relocation and other AMMs have been undertaken on it

- *Following survey and relocation of individuals, exclusion barrier will be installed at the limits of grading for the phase or sub-phase to prevent CTS from reentering the disturbance area. The materials and installation methods for the exclusion barrier will be subject to approval by CDFW and USFWS, and the barrier will be installed under biologist oversight. The exclusion barrier will be inspected weekly and maintained and repaired as necessary to ensure that it is functional and not a hazard to any CTS on the outside of the barrier. The barrier will remain in place until the completion of major ground-disturbing activities within the phase or sub-phase it encompasses*

- *Once visual surveys, relocation, and exclusion barrier installation have been completed, the disturbance area may be subject to initial ground-disturbing activities (vegetation clearing, grubbing, scraping, grading, trenching, and other activities that will convert potential CTS upland habitat to non-habitat through the disruption of onsite rodent burrows)*

- *A qualified biologist will be onsite to monitor vegetation clearing, grubbing, and rough grading, until or unless the biologist determines that monitoring is no longer necessary. The biologist(s) will have authority to stop any work that may result in the take of CTS, and to ensure the adherence to all required AMMs. CDFW, USFWS, and the Corps will be notified of any "stop-work" orders issued by the biologist(s)*

- *The following requirements will apply in areas that have not been "cleared" for CTS and enclosed in exclusion barrier*

  - *A qualified biologist will be onsite to monitor all work. The biologist(s) will have authority to stop any work that may result in the take of CTS, and to ensure adherence to all required AMMs. CDFW, USFWS, and the Corps will be notified of any "stop-work" orders issued by the biologist(s)*

  - *Work will be prohibited when the National Weather Service 72-hour forecast predicts a 70% or greater chance of rainfall; work may resume 24 hours following the cessation of rainfall, if 0% chance of rain is predicted in the next 72 hours*

  - *Because CTS may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped, all pipes, culverts, and similar structures that are stored at the project site for one or more overnight periods will either be securely capped prior to storage or will be thoroughly inspected by the*

authorized on-call biologist and/or the construction foreman/manager for CTS before the pipe moved, capped, buried, or otherwise used or moved in any way

- *To prevent inadvertent entrapment of CTS during development, the on-call biologist and/or construction foreman/manager will ensure that all steep-walled excavations and trenches more than 1 foot deep are completely covered at the close of each working day by plywood or similar materials or are provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the on-call biologist. Before excavations or trenches are filled, they will be thoroughly inspected for trapped animals by the on-call biologist and/or construction foreman/manager*

- *The following requirements will apply on all parts of the project site (within and outside CTS exclusion barrier)*
  - *Project-related vehicles will observe a 15 mile-per-hour offroad speed limit*
  - *Erosion control measures will employ tightly woven fiber netting or similar material to reduce the potential for CTS entrapment. This limitation will be communicated to all contractors through the use of Special Provisions included in the bid solicitation package. No plastic monofilament netting (erosion control matting) or similar materials will be used*
  - *No insecticides or rodenticides will be used in construction or development areas as part of the project development process*
  - *To reduce the potential that predators of CTS will be attracted to the site, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the construction site*

Over the long term, although CTS would be increasingly unlikely to use MPArea 1 as development progresses, there could be some potential for increases in direct injury or mortality by comparison with the baseline condition, due to development-related factors such traffic on new roadways, predation by domestic cats and dogs (*Canis familiaris*), and localized pesticide/herbicide use for landscaping maintenance. Impacts are unlikely to rise to a level considered significant under CEQA, but this is not impossible. However, implementation of Mitigation Measure 3.4-3, described above, includes a requirement for the MPArea 1 development applicant to complete the state ITP and Clean Water Act Section 404 permitting processes, and to abide by any resulting permit conditions issued by CDFW, USFWS, and/or the Corps. If CDFW and/or USFWS determine that the potential for long-term injury or mortality (direct take) of CTS is substantial enough to warrant concern, they are expected to require not only construction-period measures to protect CTS, but also additional long-term protective measures enforced through the state ITP and/or federal consultation process and Section 404 permit, such that take is minimized or avoided and the species is not placed in jeopardy. Thus, with Mitigation Measure 3.4-3 in place, long-term impacts related to direct injury and mortality

of CTS within MPArea 1 would be avoided or reduced to a less than significant level.[5] No additional mitigation is required.

In addition to the potential for direct take of CTS individuals, the project would also result in both direct and indirect impacts on CTS habitat, itemized in Table 3.4-5. Impact mechanisms are discussed below the table.

TABLE 3.4-5. IMPACTS ON CALIFORNIA TIGER SALAMANDER HABITAT

HABITAT CLASS	*IMPACT TYPE*	*IMPACT ACREAGE*
ITEMIZED IMPACTS		
Uplands		
Suitable upland	Direct impact	189.683
	Avoided; indirect impact	17.539
Low suitability upland	Direct impact	140.257
	Avoided; indirect impact	1.127
	Total impact on CTS upland habitat:	*348.606*
Breeding (Aquatic)		
Occupied breeding	Direct impact	0.39
	Avoided; indirect impact	0.369
Suitable breeding	Direct impact	0.105
Low suitability breeding	Avoided; indirect impact	1.129
	Total impact on CTS aquatic habitat:	*1.993*
SUBTOTALS BY HABITAT SUITABILITY		
Occupied and suitable habitat	Direct impacts	190.178
Occupied and suitable habitat	Avoided; indirect impacts	17.908
Occupied and suitable habitat	Total impact (direct and indirect)	208.086
Low-suitability habitat	Direct impacts	140.257
Low-suitability habitat	Avoided; indirect impacts	2.256
Low-suitability habitat	Total impact (direct and indirect)	142.513
	Total impact on CTS Habitat:	***350.599***

Sources: Vollmar Natural Lands Consulting 2023b, Redtail Consulting 2024

The project would result in direct fill of 0.390 acre of documented CTS breeding habitat and 0.105 acre of suitable breeding habitat. The project would also directly convert approximately

[5] Note that both the state ITP process and the federal BO will be driven by take affecting single individuals, whereas CEQA is primarily concerned with effects at the occurrence and population level, which typically result from effects on multiple individuals. Consequently, the threshold at which CDFW and USFWS will consider effects on CTS as warranting additional protective measures will be lower (more sensitive) than the CEQA threshold of significance. As such, permit and BO requirements—enforced for CEQA purposes through Mitigation Measure 3.4-3 and subsequent species-specific mitigation—would be more than adequately protective to render potential impacts less than significant under CEQA. The same reasoning applies for the other special-status species that will be covered under the state ITP and/or federal BO.

189.7 acres of presumed-occupied CTS upland habitat, as well as approximately 140.3 acres of low-suitability upland habitat, to developed land. These losses of habitat represent an indirect adverse effect on CTS due to habitat loss, which would be incurred progressively as the project phases move forward.

CTS depend on the ability to migrate between their breeding pools and the large areas of open grassland where the adults spend most of their lives. Development in the vicinity of breeding pools has the potential to interrupt that migration, reducing the ability of new metamorphs to reach shelter and food and the ability of adults to find their way back to the ponds to breed.

Additionally, conversion of existing grasslands to developed areas may modify breeding pools' watersheds or outlets by increasing the amount of impervious surface and/or redirecting storm runoff. Exotic species may be introduced from landscaping within developed areas, and input of native-species seed and pollen reduced by the decrease in buffer lands supporting native vegetation. Pools near development may also be subject to increased human visitation.

Several aquatic features suitable for CTS would be avoided by the project and protected by buffering open space, but would be subject to potential long-term indirect effects due to their proximity to developed areas at project buildout. These include the following.

- Three documented CTS breeding pools (totaling 0.369 acre)
    - The agricultural tailwater pond (1.129 acre), which offers low-suitability CTS breeding opportunities

A fourth documented breeding pond located immediately outside MPArea 1 in MPArea 2 would be surrounded on two sides by MPArea 1 development, but would retain some connectivity to remaining grasslands until MPArea 2 is developed.

Potential for degradation of CTS habitat due to proximity to development would represent an indirect adverse effect on the species. Like loss of habitat, this would be incurred progressively as MPArea 1 progresses toward full buildout.

Because of the large acreages involved, both loss and potential degradation of CTS habitat are considered a significant indirect impact on the species. However, implementation of Mitigation Measure 3.4-3, described above, includes a requirement for the MPArea 1 development applicant to complete the state ITP and Clean Water Act Section 404 permitting processes, and to abide by any resulting permit conditions issued by CDFW, USFWS, and/or the Corps. Permit conditions are expected to include a requirement that the applicant compensate for loss and degradation of CTS habitat at a ratio such that the indirect impact related to loss of habitat is offset over the long term.

The MPArea 1 applicant intends provide this compensation by dedicating an extensive tract of conservation lands on a ranch property in the Four Corners area near Madera, about 15 miles northwest of MPArea 1. The proposed mitigation site (hereafter referred to as the Property) consists almost entirely of undeveloped rangeland; other than fences, the only existing development is a set of corrals in the northwest portion of the site. The few existing roads on the Property, currently used

for site access and management, are ungraded and unimproved (dirt surface). Both aquatic and upland habitat at the Property is in good condition, to the extent that the Property had previously been proposed as a mitigation bank offering credits for purchase. Together, the site's aquatic and upland resources provide a functional, interconnected habitat mosaic—and, unlike many vacant Central Valley lands, including the majority of MPArea 1, the Property has never been cultivated. Conservation of lands on the Property is thus expected to create a substantial preserve offering a mosaic of high-quality vernal pool/vernal swale, stream, and annual grassland habitat that is currently documented as supporting at least 13 special-status species, including CTS (Vollmar Natural Lands Consulting 2021; Redtail Consulting 2023, 2024).

The MPArea 1 applicant has initiated preliminary discussions with CDFW, USFWS, the Corps, and the RWQCB about the mitigation proposal. These will continue as the state ITP and other permitting processes move forward. The final extent and configuration of the mitigation preserve will be developed with agency input, and will be subject to review and approval by the agencies. Purchase of mitigation Property, establishment of conservation easement, and finalization of agreements for long-term maintenance and management responsibilities shall be completed prior to project ground-disturbance. Consequently, with implementation of Mitigation Measure 3.4-3, ensuring that appropriate compensatory mitigation will be in place through multiple resource agency permit vehicles, impacts on CTS habitat are considered less than significant. No further mitigation is required.

Impacts on San Joaquin Kit Fox. No sign of SJKF presence was observed in MPArea 1 during extensive field surveys conducted in 2023, and due to existing disturbance levels, the site offers less-than-optimal opportunities for the species (Vollmar Natural Lands Consulting 2023b). Moreover, there are no CNDDB records of SJKF within 10 miles of the MPArea 1; the closest recorded sighting, from the 1990s, and is from a location 10.2 miles away; and current populations of the species are concentrated in the southern San Joaquin Valley, Carrizo Plain, and east/southeastern Coast Ranges (Smith pers. Comm, 2024).

SJKF is not considered likely to use MPArea 1, to the extent that the Corps and USFWS recently removed it from the ESA Section 7 consultation for the project, as noted above (Barnes pers. comms.), although its presence as a casual visitor cannot be entirely ruled out. In this context, direct injury or mortality of SJKF during construction in MPArea 1 seems extremely unlikely, but it is not impossible. Depending on the extent of injury/mortality to individuals, there may be some potential for impacts to rise to a level considered significant under CEQA. To address this, the City will require implementation of Mitigation Measure 3.4-2 (described above), which requires worker awareness training for special-status species issues, and Mitigation Measure 3.4-4, with additional protections for SJKF. With these measures in place, construction-period impacts related to direct injury and mortality of SJKF would be reduced consistent with current best conservation practices, under the oversight of CDFW. Residual impacts, if any, are accordingly considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-4: *The MPArea 1 development applicant will complete the state ITP permitting process and will obtain the necessary permits from CDFW. The applicant will then be responsible for implementing all permit conditions relative to San Joaquin kit fox (SJKF), including AMMs and habitat compensation. Purchase of mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.*

The following AMMs will be required, unless CDFW issues written concurrence that SJKF is not present in the MPArea 1 vicinity; in this case no further action regarding SJKF will be required. If, via the state ITP process, CDFW issues alternate requirements that would be equally or more protective of the species, those will be substituted.

- *Prior to ground disturbance for each phase or sub-phase (defined as major earthwork associated with rough grading, lot leveling, infrastructure construction, and street improvements; not including construction of individual homes on previously graded pads), the applicant will retain a qualified biologist to survey the project area and a 500-foot-wide buffer for the presence of potential dens and other SJKF sign. The survey buffer will extend to the boundary of property to which the applicant has legal access; survey of property owned/controlled by others will not be required. Potential and confirmed dens will be GPS-located and mapped. Surveys will be conducted no more than 30 days prior to the start of work, and results will be submitted to CDFW and USFWS within 10 days of survey completion*

- *If no sign of SJKF presence is observed, no further action will be required*

- *If SJKF is observed onsite or within 500 feet of the work area, work will be delayed until the biologist has confirmed that all kit fox have left the survey area of their own volition*

- *Additionally, if sign of SJKF is detected, a qualified biologist will be available onsite during all project-related activities that could impact the species such as vehicle or equipment traffic, materials storage, equipment staging, and excavation, grading, and other ground-disturbing activities that could damage or remove dens or rodent burrows*

- *If SJKF dens are found, they will be buffered and avoided as follows.*

  - *Potential or atypical den: 50 feet*

  - *Occupied den: 100 feet*

  - *Occupied pupping/natal den: 500 feet*

  Avoidance buffers will be delineated in the field under the supervision of the biologist, using temporary construction fencing or another appropriate low-impact medium. No entry of personnel, equipment, or materials will be permitted into the den buffers

- *If any occupied SJKF pupping dens are discovered once work has begun, work within 500 feet of the den(s) will be suspended, and the applicant will immediately contact the biologist, who will consult with CDFW and USFWS for further guidance.*

- *Absolutely no disturbance to known occupied SJKF dens will be allowed, and no work will occur within the above buffers without written authorization from CDFW and USFWS, which it is understood may entail additional conditions and/or limitations*

Over the long term, development of MPArea 1 would render the site and its immediate surrounds progressively less appealing to SJKF, and long-term increases in injury or mortality by comparison with the baseline condition are therefore considered unlikely. but not entirely impossible. Depending on the extent of injury/mortality to individuals, there may be some potential for impacts related to direct injury or mortality of SJKF to a level considered significant under CEQA. However, Mitigation Measure 3.4-4, described above, includes a requirement for the MPArea 1 development applicant to complete the state ITP and Clean Water Act Section 404 permitting processes, and to abide by any resulting permit conditions issued by CDFW, USFWS, and/or the Corps, including those for SJKF. If CDFW and/or USFWS conclude that the potential for long-term injury or mortality (direct take) of SJKF is substantial enough to warrant concern, they are expected to require additional long-term protective measures enforced through the state ITP and/or federal consultation process and Section 404 permit, such that take is minimized or avoided and the species is not placed in jeopardy. Thus, with Mitigation Measure 3.4-4 in place, long-term impacts related to direct injury and mortality of SJKF within MPArea 1 would be avoided or reduced to a less than significant level. No additional mitigation is required.

Additionally, over about the next 10 years, development of MPArea 1 would result in conversion of some 189.683 acres of potentially suitable SJKF habitat in grasslands and another 140.257 acres of potentially suitable habitat in previously cultivated areas to developed uses. These losses have some potential to result in indirect adverse effects on the species, although the potential is considered limited in view of the species' current distribution and the lack of recent documented occurrences within 10 miles of the site.

An additional 17.539 acres of potentially suitable grassland habitat and 1.127 acres of potentially suitable habitat in previously cultivated areas would be subject to indirect effects related to proximity to the new development. Indirect effects would include

- disconnection from remaining potentially suitable and marginally suitable habitat in the project vicinity

- increased human presence; potential for disturbance due to human activity, habitat incursions, noise, night-time lighting (a key concern for this largely nocturnal species), etc.

- potential for increased trash and pollutant input due to neighboring development

- added vehicular traffic, much of it on new roadways, increasing the potential for death or injury of any SJKF remaining in the area

Indirect effects on SJKF habitat also represent a potential adverse effect on the species.

However, as discussed above for CTS, the MPArea 1 applicant proposes to dedicate a substantial tract of grassland and wetlands located in the Four Corners area east of Madera as compensation for losses of special-status species habitat due to development of MPArea 1. The proposed preserve lands are within SJKF's documented geographic range, offer extensive areas of grassland suitable for the species, and are of substantially higher quality than the habitat currently available within MPArea 1. Discussions with CDFW, USFWS, the Corps, and the RWQCB are ongoing regarding the details of the proposed preserve. As identified above, the final extent and boundaries of the proposed preserve will be developed with agency input to maximize benefit to species and will be subject to agency review and approval. With Mitigation Measure 3.4-4 in place to enforce this commitment via the resource agency permitting process, long-term effects on SJKF due to loss of habitat within MPArea 1 would be substantively addressed and are considered less than significant. No additional mitigation is required.

Impacts on Crotch's Bumble Bee. CDFW's California Natural Diversity Database (CNDDB) contains only two records for Crotch's bumble bee in the MPArea 1 region. The closest CNDDB-documented occurrence of the species is 5.0 miles away, but is decades old and has not been re-observed in recent years. The closest CNDDB occurrence within the last 20 years is 37 miles away (Vollmar Natural Lands Consulting 2024). There is also a "citizen science" report of the species near Millerton Lake, less than 10 miles away, in 2023 (Xerces Society 2024).

However, species-specific surveys in MPArea 1 (in progress as of late April 2024) found two individuals onsite (Smith pers. comm., 2024).[6] Suitable habitat for the species is present in MPArea 1's grasslands, in the depressional wetlands during the dry season, and in portions of the existing farm headquarters. There is thus some potential for development in MPArea 1 to affect both Crotch's bumble bee individuals and the species' habitat.

During construction within MPArea 1, direct injury or mortality of Crotch's bumble bee could occur as a result of vegetation clearing or even as a result of individuals being perceived as a nuisance and swatted by construction staff. Because Crotch's bumble bee nests underground, there is also some potential that grading for development of MPArea 1 could disturb or destroy nests. Depending on the extent of injury/mortality to individuals, there may be potential for impacts rising to a level considered significant under CEQA. To address this, the City will require implementation of Mitigation Measure 3.4-2 (described above), which requires worker awareness training for special-status species issues, and Mitigation Measure 3.4-5, with additional protections for Crotch's bumble bee. With these measures in place, construction-period impacts related to direct injury and mortality of Crotch's bumble bee would be reduced consistent with current best conservation

[6] The 2024 surveys are being conducted consistent with *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (California Department of Fish and Wildlife 2023b).

practices, under the oversight of both CDFW and USFWS. Residual impacts, if any, are accordingly considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-5: *The MPArea 1 development applicant will complete the state ITP and Clean Water Act Section 404 permitting processes and will obtain the necessary permits from CDFW and the Corps. The applicant will then be responsible for implementing all permit conditions relative to Crotch's bumble bee, including AMMs and habitat compensation. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.*

At a minimum, the following AMMs will be required. If, via the state ITP process or the federal interagency consultation process, CDFW and/or USFWS issue alternate requirements that would be equally or more protective, those will be substituted.

- *No more than 1 year prior to the initiation of vegetation removal and grading at the project site, the applicant will retain an appropriately qualified biologist (see next paragraph) to conduct surveys for Crotch's bumble bee*

- *Surveys will be performed by a qualified entomologist familiar with the species' behavior and life history and will include both habitat evaluations and foraging bee surveys consistent with the recommendations in Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. Surveys will be conducted during the peak worker activity period for Crotch's bumble bee (April 1 – July 31; Williams et al. 2014) and will cover all areas of onsite habitat determined by the biologist to be suitable for the species, based on habitat mapping conducted for the project to date and observations on the site at the time of survey. A minimum of 3 – 4 surveys will be conducted, spaced 2 weeks apart; the total number, timing, and duration of surveys performed will depend on the biologist's judgment, in consideration of weather, site conditions, and current CDFW recommendations/protocols*

- *If no Crotch's bumble bee individuals are observed onsite, and no sign of the species' presence is detected, during the surveys, no further action will be required*

- *If Crotch's bumble bee is observed onsite during the surveys, an additional survey or surveys will be conducted to determine whether a nest or colony is present, unless the biologist is satisfied that the initial survey(s) were sufficient to rule out the presence of nests/colonies*

- *If a nest or colony is present onsite, the biologist will establish an appropriate avoidance buffer determined in consideration of site conditions and the construction activities planned prior to the close of the nesting season. No entry into the buffer will be permitted. The buffer will be delineated in the field using orange construction fencing or another appropriate medium, under the biologist's oversight, and will remain in place until the*

end of the Crotch's bumble bee gyne flying season (February 21 – August 7; Williams et al. 2014), or until the biologist determines that the nest has been abandoned

- *If no nest/colony is present onsite, no further action need be taken*
- *To support improved understanding and conservation of Crotch's bumble bee, survey results, including negative findings, will be submitted to CDFW before project-related ground disturbance begins. At a minimum, the survey report will include the following information*

  (1) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee

  (2) Field survey conditions, including name(s) of qualified entomologist(s) and brief qualifications; date(s) and time(s) of survey; survey duration; general weather conditions; survey goals; and species searched

  (3) Map(s) showing the location of nests/colonies, if any

  (4) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found, including native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species)

  (5) The measures that will be implemented to avoid adverse effects on the bumble bee species present (AMMs)

  (6) An assessment of potential effects on special-status bumble bees during project construction and project operation/maintenance, with AMMs in place

- *Additionally, all workers will be required to avoid injury and mortality to bumble bees they may encounter; this requirement will be discussed during the Worker Awareness Training required for all construction personnel, and will be reiterated to all workers if special-status bumble bees are confirmed onsite*

Over the long term, as MPArea 1 is progressively developed, the site is expected to become less appealing to Crotch's bumble bee and the species is expected to be less likely to be present. Potential long-term effects related to direct injury and mortality of Crotch's bumble bee and destruction of the species' nests are therefore considered unlikely, and if they do occur would be less extensive than potential impacts during active construction of each phase. Significant long-term impacts related to direct injury and mortality of individuals are thus considered unlikely, but cannot be entirely ruled out. However, Mitigation Measure 3.4-5, described above, includes a requirement for the MPArea 1 development applicant to complete the state ITP and Clean Water Act Section 404 permitting processes, and to abide by any resulting permit conditions issued by CDFW, including those for Crotch's bumble bee. If CDFW concludes that the potential for long-term injury or mortality (direct take) of Crotch's bumble bee is substantial enough to warrant concern, they are expected to

require additional long-term protective measures enforced through the state ITP such that take is minimized or avoided and the species is not placed in jeopardy. Thus, with Mitigation Measure 3.4-5 in place, long-term impacts related to direct injury and mortality of Crotch's bumble bee within MPArea 1 would be avoided or reduced to a less than significant level. No additional mitigation is required.

Additionally, as a grassland species, Crotch's bumble bee would be subject to similar indirect effects as SJKF—loss of suitable habitat, and "edge effect" pressures on remaining potentially suitable grasslands in and around MPArea 1. As discussed for SJKF, project-related loss and potential additional degradation of habitat would be localized enough that it is considered unlikely to independently jeopardize the survival of Crotch's bumble bee statewide, but it could represent an added pressure on the species, to the extent it is present in the Project area. It is particularly difficult to assess the importance of this pressure on Crotch's bumble bee because the species is less well understood than many other at-risk taxa and its occurrence/distribution in the Project vicinity is uncertain.[7] In light of these uncertainties any increased pressure could represent a concern.

However, the mitigation Property proposed to compensate for impacts on special-status species—discussed above—includes extensive grasslands of substantially higher quality than those at MPArea 1. The extent and configuration of the mitigation preserve will be determined in consultation with CDFW and in consideration of the need to compensate for losses of potential Crotch's bumble bee habitat, and final preserve boundaries will be subject to CDFW approval as a condition of the state ITP, without which development of MPArea 1 cannot proceed. This would ensure the long-term preservation of suitable habitat at a compensatory ratio determined appropriate by CDFW. With Mitigation Measure 3.4-5 in place to enforce this commitment, indirect impacts on Crotch's bumble bee due to loss and degradation of habitat would be appropriately offset and are considered less than significant. No additional mitigation is required.

Impacts on Vernal Pool Fairy Shrimp. VPFS is known to be present in at least some of the MPArea 1 wetlands proposed for fill/removal during development of MPArea 1 (Vollmar Natural Lands Consulting 2023d).

As discussed in Section 2.0 Project Description and above for CTS impacts, the MPArea 1 development layout avoids wetland impacts to the extent possible while still accomplishing project objectives. Construction disturbance would have the potential to result in short-term degradation of VPFS habitat in wetlands planned for avoidance, but this should be effectively avoided by the erosion and sediment control measures in the Stormwater Pollution Prevention Plan(s) (SWPPPs) that will be required for construction within MPArea 1, discussed in more detail under Impact 3.4-4

[7] Uncertainties about the species' ecology and distribution are a key reason Mitigation Measure 3.4-5 emphasizes not only avoidance of direct injury and mortality but also collection and reporting of data on Crotch bumble bee.

below. Indirect construction-period impacts on VPFS habitat "to remain" are therefore expected to be less than significant. No mitigation is required.

Development of MPArea 1 would require fill/removal of wetlands, including wetlands known to support VPFS. Impacts on VPFS individuals and/or cysts during construction are therefore possible. Development of MPArea 1 would also result in direct losses of VPFS habitat as summarized in Table 3.4-6 below. Additionally, as development proceeds around them, wetlands avoided and protected in place could be subject to long-term degradation due to proximity to developed uses, also itemized in Table 3.4-6. This could represent a long-term indirect impact on VPFS.

TABLE 3.4-6. IMPACTS ON VERNAL POOL FAIRY SHRIMP HABITAT

HABITAT CLASS	*IMPACT TYPE*	*IMPACT ACREAGE*
Suitable, known or presumed occupied	Direct impact	0.061
	Avoided; indirect impact	0.745

Source: Vollmar Natural Lands Consulting 2023b

Although the acreages affected are fairly small, all of these impacts (direct loss of individuals/cysts, direct loss of habitat, and long-term degradation of remaining habitat) nonetheless have the potential to rise to a level considered significant under CEQA.

However, as described above for CTS, the MPArea 1 applicant proposes to dedicate a substantial tract of undeveloped land located in the Four Corners area east of Madera as compensation for losses of special-status species habitat due to development of MPArea 1. The proposed preserve lands are within USFWS-designated Critical Habitat for VPFS and the species is known to be present on the preserve site (Vollmar Natural Lands Consulting 2021). As currently proposed, the preserve would provide mitigation for losses of VPFS habitat at an approximately 73:1 ratio, which includes known occupied habitat. As noted above, discussions with CDFW, USFWS, the Corps, and the RWQCB are ongoing regarding the details of the proposed preserve; preserve boundaries will be finalized with agency input to maximize benefit to species and will be subject to agency review and approval. With Mitigation Measure 3.4-6 in place to enforce this commitment via the resource agency permitting process, long-term effects on VPFS due to loss and degradation of habitat within MPArea 1 would be substantively addressed under oversight of the resource agencies and are considered less than significant. No additional mitigation is required.

Loss of individual fairy shrimp/fairy shrimp cysts during active construction would also be addressed by the extensive conservation set-aside of known occupied habitat and any other conditions required by the resource agencies under Mitigation Measure 3.4-6, and with these commitments in place is not expected to jeopardize long-term success of the species in the Project region. This impact is therefore also considered less than significant with Mitigation Measure 3.4-6 incorporated. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-6: *The MPArea 1 development applicant will complete the Clean Water Act Section 404 permitting process and will obtain the necessary permit from the Corps. The applicant will then be responsible for implementing all permit conditions and USFWS BO*

conditions relative to VPFS, including AMMs and habitat compensation. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.

Impacts on Western Spadefoot. Western spadefoot has been documented within MPArea 1 and is known to breed in a number of the wetlands proposed for fill/removal to accommodate development in this portion of the Project area. Grasslands in MPArea 1 provide suitable upland habitat for adult individuals. Development of MPArea 1 thus has potential to result in direct injury or mortality of individuals during construction. It would also result in direct losses of western spadefoot habitat due to wetland fill, and potentially also in long-term indirect impacts on the species due to degradation of remaining habitat in wetlands that are avoided and protected in place. Habitat impacts are summarized in Table 3.4-7. All of these impacts (direct injury and mortality, direct habitat loss, long-term degradation of remaining habitat) have the potential to rise to a level considered significant under CEQA.

TABLE 3.4-7. IMPACTS ON WESTERN SPADEFOOT HABITAT

HABITAT CLASS	*IMPACT TYPE*	*IMPACT ACREAGE*
ITEMIZED IMPACTS		
Uplands		
Suitable upland	Direct impact	189.683
	Avoided; indirect impact	17.539
Low suitability upland	Direct impact	140.257
	Avoided; indirect impact	1.127
Total impact on western spadefoot upland habitat:		*348.606*
Breeding (Aquatic)		
Occupied breeding	Direct impact	0
	Avoided; indirect impact	0.632
Suitable breeding	Direct impact	0.495
Low suitability breeding	Avoided; indirect impact	1.129
Total impact on western spadefoot aquatic habitat:		*2.256*
SUBTOTALS BY HABITAT SUITABILITY		
Occupied and suitable habitat	Direct impacts	190.178
Occupied and suitable habitat	Avoided; indirect impacts	18.171
Occupied and suitable habitat	Total impact (direct and indirect)	208.349
Low-suitability habitat	Direct impacts	140.257
Low-suitability habitat	Avoided; indirect impacts	2.254
Low-suitability habitat	Total impact (direct and indirect)	142.513
Total impact on western spadefoot habitat:		***350.862***

Source: Vollmar Natural Lands Consulting 2023b, Smith pers. comm.[b]

However, as discussed for CTS and other species above, the MPArea 1 applicant proposes to dedicate a substantial conservation preserve to offset impacts on listed species and their habitat. The proposed preserve lands offer both breeding and upland habitat for western spadefoot, and the

species is known to be present and breeding there (Vollmar Natural Lands Consulting 2021). As currently proposed, the preserve would provide mitigation for losses of suitable western spadefoot upland habitat at a ratio of 3:1 and low-suitability upland habitat at a ratio of 2:1; these are the same ratios proposed for CTS. Studies of aquatic habitat at the mitigation site are continuing in parallel with agency dialogue, but based on information currently available, the proposed preserve is expected to provide compensation for losses of western spadefoot aquatic (breeding) habitat at a ratio between 2:1 and 4:1 (Smith pers. comm.[b]). As noted elsewhere, discussions with CDFW, USFWS, the Corps, and the RWQCB are ongoing regarding the details of the proposed preserve and boundaries will be adjusted if the agencies determine this is warranted to provide adequate compensation for losses of western spadefoot (or other species) habitat. Preserve boundaries will be finalized with agency input to maximize benefit to species and will be subject to agency review and approval. With Mitigation Measure 3.4-7 in place to enforce this commitment via the resource agency permitting process, effects on western spadefoot due to loss and degradation of habitat within MPArea 1 would be substantively addressed and are considered less than significant. No additional mitigation for indirect impacts related to habitat loss and degradation is required.

Direct impacts on western spadefoot during construction would be reduced or avoided by implementation of Mitigation Measure 3.4-2, discussed above, in combination with Mitigation Measure 3.4-7 below. With these measures incorporated, direct construction-period impacts related to injury and mortality of individuals are also expected to be less than significant. No further mitigation is required during the construction period.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-7: *The MPArea 1 development applicant will complete the Clean Water Act Section 404 permitting process and will obtain the necessary permit from the Corps. The applicant will then be responsible for implementing all permit conditions and USFWS BO conditions relative to western spadefoot, including AMMs and habitat compensation. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.*

At a minimum, all AMMs identified in Mitigation Measure 3.4-3 for CTS will also be required for western spadefoot. Surveys, relocation efforts, and activities related to exclusion barriers will be combined where feasible to increase efficiency and effectiveness. If, via the federal interagency consultation process, USFWS issues alternate requirements that would be equally or more protective, those will be substituted.

If western spadefoot does not become listed under the federal Endangered Species Act <u>and</u> the federal BO and Clean Water Act Section 404 permit do not prescribe other requirements, the requirements of Mitigation Measure 3.4-9 may be substituted. In this case, surveys and, if warranted, relocation of individuals, will be conducted consistent with agency guidance current at the time of survey, and with prevailing best conservation practices.

Impacts on Western Pond Turtle. MPArea 1 offers low-quality aquatic habitat and suitable upland habitat for western pond turtle, and the closest documented occurrence (from 2016) is only 0.8 mile away, within a reasonable dispersal distance for this highly mobile species (Vollmar Natural Lands Consulting 2023). The species is thus considered to have potential to occur, and as identified above, is included in the Corps' consultation request to USFWS.

However, western pond turtle has not been observed in MPArea 1, despite extensive field surveys conducted over the past two years, many of which concentrated on the site's aquatic features. Moreover, aquatic habitat in MPArea 1 is less than ideal for the species. In particular, the Outlet Channel, as a constructed trapezoidal feature with no riparian corridor, lacks haulout and basking opportunities such as inchannel bars, beaches, and instream woody material. The stockponds provide only low-quality habitat due to their small size, limited depth and inundation period, and lack of basking habitat and cover. The most appealing feature on the site is the agricultural tailwater pond, but its utility for western pond turtle is substantially reduced by its irregular hydroperiod, which is controlled by releases from the dam in combination with overland runoff. Habitat of better quality is available offsite within the Big Dry Creek Reservoir, upstream reaches of Dry Creek, and possibly also in wetted reaches of Dry Creek downstream of the confluence with the Outlet Channel. The species is therefore considered unlikely to use the project site to any great extent.

In this context, there may be some, probably fairly low, potential for disturbance, injury, or mortality of individuals during construction, and possibly also some potential for long-term increases in injury or mortality due to elevated traffic levels and predation by household pets once the new development is occupied. Although significant impacts related to injury and mortality are not considered likely over either the short or long term, they are not impossible.

Additionally, up to 0.39 acre of low-quality stockpond habitat and 329.94 acres of upland habitat for the species would be subject to direct loss to accommodate construction. Potential habitat in the agricultural tailwater pond (1.129 acres) and Outlet Channel (slightly more than 1.4 acres) could be subject to long-term degradation due to proximity to development. These are also considered unlikely to represent significant impacts since the species is not thought to use the site, but significant impacts related to habitat loss and degradation are not impossible.

To address all of these issues, the City will require implementation of Mitigation Measure 3.4-8. With this measure in place, impacts, if any, would be reduced to a less than significant level. No additional mitigation is required.

MITIGATION MEASURE(S)

> ***Mitigation Measure 3.4-8:*** *The MPArea 1 development applicant will complete the Clean Water Act Section 404 permitting process and will obtain the necessary permit from the Corps. The applicant will then be responsible for implementing all permit conditions and USFWS BO conditions relative to western pond turtle, including AMMs and habitat compensation. Purchase of any mitigation property, establishment of any necessary conservation easement, and finalization of any agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.*

If western pond turtle does not become listed under the federal Endangered Species Act and the federal BO and Clean Water Act Section 404 permit do not prescribe other requirements, the requirements of Mitigation Measure 3.4-9 may be substituted. In this case the applicable guidance will be Draft USGS Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (U.S. Geological Survey 2006)

California linderiella. As identified in Table 3.4-2, California linderiella is known to be present in wetlands within MPArea 1. Because the species' habitat requirements are very similar to those of VPFS, the potential for impacts on California linderiella is essentially the same as that described above for VPFS: potential for direct loss of individuals/cysts during active construction, along with direct loss of habitat and long-term degradation of remaining habitat. These impacts have the potential to rise to a level considered significant under CEQA. However—again because of the similarity between the two species' habitat requirements—Mitigation Measure 3.4-6, proposed to address impacts on VPFS and described above, would also address impacts on California linderiella such that the species is not placed at increased risk either locally or regionally. With Mitigation Measure 3.4-6 in place, impacts on California linderiella, like those on VPFS, would be less than significant, for the same reasons provided for VPFS. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-6: *described above.*

Other Special-Status Wildlife. As identified in Table 3.4-3, multiple additional species of special-status wildlife in addition to those for which the development applicant is seeking state ITP and/or federal BO coverage have some potential to be present in MPArea 1. None of these species has been documented onsite and none is considered likely to occur based on known occurrences and habitat conditions onsite, but the potential for their presence cannot be entirely ruled out. These include species that are neither state- nor federally listed but qualify for some other form of state special-status, as well as several listed species.

Development of MPArea 1 over time would thus have some (low) potential to result in both direct injury and mortality to individuals of these species during construction, as well as long-term indirect effects related to loss and/or degradation of habitat. At worst, impacts could rise to a level considered significant under CEQA. To address this, the City will require implementation of Mitigation Measure 3.4-2 (described above), to ensure that construction staff are aware of the potential for special-status species to be present, how to recognize them in the field, and proper notification and follow-up procedures in the event individuals are observed. The City will also require implementation of Mitigation Measure 3.4-9, which requires additional special-status species survey and follow-up actions to protect them in the event any are confirmed present. With these measures in place, impacts on the other special-status wildlife species identified as having potential to be present at MPArea 1 would be reduced consistent with current best practices; any residual impact is considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-9: *Prior to construction in each of the MPArea 1 phases, the applicant will retain a qualified biologist/ecologist with experience in the Fresno County area to conduct comprehensive preconstruction surveys for special-status wildlife. Surveys will be timed to allow follow-up such as relocation of individuals and/or consultation with resource agency staff if warranted. Surveys will be designed and implemented in consideration of the particular species with potential to be present; survey methods will be consistent with prevailing best practices by species and consistent with current applicable agency guidance, including but not necessarily limited to the following, currently available at https://wildlife.ca.gov/Conservation/Survey-Protocols (or updated versions thereof).*

- *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (California Department of Fish and Wildlife 2023b)*
- *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015 (California Department of Fish and Wildlife 2015)*
- *Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012)*
- *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000)*
- *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or during Ground Disturbance (U.S. Fish & Wildlife Service 1999)*

If no special-status wildlife or sign thereof is observed during the surveys, no further action is required.

If listed or candidate species or sign(s) thereof are observed onsite, the applicant will consult with CDFW and/or USFWS (depending on the species' listing status), and will proceed in accordance with agency direction.

If non-listed species that qualify for another form of special status in California, or sign(s) thereof, are observed onsite, the applicant will consult with CDFW and proceed in accordance with CDFW direction.

Follow-up actions for common (non-listed/non-special-status) species will be consistent with the biologist's professional judgment and current prevailing conservation best practices.

Nesting and Otherwise Protected Birds (General and Special-Status). As identified above, MPArea 1 has the potential to support foraging and nesting by a number of bird species, including some that qualify for various forms of special status such as Cooper's Hawk, and others that are common species protected only under the federal Migratory Bird Treaty Act and/or California Fish and Game Code.

Direct impacts on adults of these species during construction are considered unlikely due to the mobility of individuals. Additionally, abundant habitat of similar value will remain available in the area following development of MPArea 1 so habitat loss is not expected to put any of these species at substantially increased risk. Impacts related to loss of individual adult birds, and impacts related to habitat loss for protected birds, are therefore both considered less than significant. No mitigation is required.

However, the noise and activity associated with construction for development of MPArea 1 has the potential to disturb nesting birds, potentially resulting in nest failure. Direct destruction of nests is also possible, as a result of vegetation clearing and grading. Disruption of nesting activity and direct loss of nests, eggs, or young—impacts that impede reproduction and at worst could reduce local population success—have the potential to rise to a level considered significant under CEQA. To address this, the City will require implementation of Mitigation Measure 3.4-2 (described above), which requires worker awareness training for species protection, and Mitigation Measure 3.4-10, requiring (1) pre-construction survey for nesting birds of all species and (2) protections to enable any birds nesting onsite to complete their reproductive cycles so populations are maintained. With these measures in place, impacts would be avoided to the extent feasible and in a manner consistent with current prevailing conservation practice and resource agency guidance. Residual impacts are accordingly considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-10: *At a minimum, the following precautions will be required to protect CESA-listed bird species whose presence cannot be ruled out, as well as other special-status birds, and common species protected under the California Fish and Game Code and/or the federal Migratory Bird Treaty Act. The applicant will be responsible for implementing all measures. With prior written approval from CDFW—and, if federally protected species are involved, USFWS—equally protective measures may be substituted.*

- *If vegetation removal or trimming, clearing/grubbing, or grading for any project phase or sub-phase commences during the nesting/breeding season of native bird species potentially nesting on or near the work site (February 1 – September 15), the applicant will retain a qualified biologist to conduct a preconstruction survey for nesting birds. The survey will employ binoculars and will take place no more than 2 weeks prior to the initiation of work. If work is suspended for more than 1 week during the nesting season, re-survey will be required before work is reinitiated*

- *If no active nests are documented and no nest-building activity is observed within the area to be disturbed for project construction (including staging and access), no further action is required.*

- *If nest-building activity is observed or active nests are found in areas that could be directly affected by project activities, or in locations where they could be disturbed by construction activity and noise, the following measures will be implemented, at a minimum.*

- *No-disturbance buffer zone(s) will be established for nest protection. Buffers will remain in place for the remainder of the nesting season or until the biologist determines that all young have fledged or that the nest has been abandoned. No entry of personnel, equipment, or materials into the no-activity buffer will be permitted without authorization from CDFW (and if federally protected species are involved, USFWS)*

- *Buffers will be delineated in the field by or under the supervision of the biologist, using temporary construction fencing or another suitable low-impact medium. The size of the buffer zone(s) will be determined by the biologist based on the species involved, their behavior, the amount of vegetative and other screening between the nest and the locations(s) where potentially disturbing activities will be occurring, and, if appropriate, other site-specific factors. The minimum buffer widths will be as follows*

    - *500 feet for raptors other than Swainson's Hawk; 0.5 mile for Swainson's Hawk*

    - *300 feet for Tricolored Blackbird*

    - *50 feet for all other species, unless modified by the biologist based on site-specific observations*

- *Buffers may be enlarged by taking into account factors such as the following.*

    - *Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity*

    - *Sensitivity of the nesting species and behaviors of the individual nesting birds*

Swainson's Hawk. CDFW's December 2023 comment letter on the NOP identified Swainson's Hawk as a species of potential concern for the larger Project, and as Table 3.4-3 identifies, MPArea 1 offers potential nesting and foraging habitat for this species, although the closest documented occurrence is 16.3 miles away and it has not been observed onsite during extensive studies conducted for project planning, including protocol-level nesting surveys in progress as of April 2024. Nonetheless, MPArea 1 is within the species' known range, and there is thus some potential that it could be present.

The MPArea 1 developer is not applying for state ITP coverage for Swainson's Hawk, as direct injury or mortality of adult individuals during construction is considered unlikely due to the species' mobility, and take of nests, eggs, and young—which could rise to the level of a significant impact, depending on the extent of the loss—would be effectively avoided by implementation of Mitigation Measure 3.4-10, described above. With Mitigation Measure 3.4-10 incorporated, impacts on

Swainson's Hawk during the construction period are expected to be less than significant. No additional mitigation is required.

Over the longer term, as MPArea 1 approaches buildout, Swainson's Hawk is expected to be less and less likely to use the site, due to decreasing availability of habitat and increasing human presence. Once buildout is complete, Swainson's Hawk is not expected to use MPArea 1 itself, although it could be present in remaining open areas to the north. From the perspective of direct impacts, buildout of MPArea 1 would in essence relocate the current urban/undeveloped space boundary northward but would not materially alter the situation with regard to the potential for Swainson's Hawk presence (and thus for impacts on the species): inhospitable developed areas abutting remaining open lands that offer forage and nesting opportunities. Direct injury and mortality of Swainson's Hawk during long-term use and occupancy of MPArea 1 development is therefore not expected to increase substantially above the current baseline condition. Direct impacts on the species over the long term are accordingly also considered less than significant. No additional mitigation is required.

As a grassland and open fields forager, Swainson's Hawk would be subject to long-term indirect impacts related to habitat loss similar to those described above for SJKF and Crotch's bumble bee: loss of a substantial extent of suitable foraging habitat, in addition to loss of nesting opportunities. This is considered a significant impact. However, the mitigation Property proposed to compensate for impacts on special-status species—discussed above—includes extensive grasslands of substantially higher quality than those at MPArea 1, where—unlike MPArea 1—Swainson's Hawk has repeatedly been observed foraging (Vollmar Natural Lands Consulting 2023b). The mitigation site does not offer nesting habitat, but suitable large trees are present in rural/semi-rural development immediately to the west. To ensure that the mitigation preserve provides adequate compensation for losses of Swainson's Hawk habitat, the City will require implementation of Mitigation Measure 3.4-11. With this measure in place, impacts related to loss of Swainson's Hawk habitat would be reduced to a less than significant level. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-11: *Planning for the mitigation preserve proposed to compensate for losses of special-status species habitat will take into account project impacts on Swainson's Hawk foraging habitat within MPArea 1 and will be guided by current CDFW mitigation ratios for losses of Swainson's Hawk habitat. Final preserve boundaries will be subject to CDFW approval, as enforced through the state ITP process and Mitigation Measure 3.4-3. Purchase of the mitigation property, establishment of the necessary conservation easement, and finalization of agreements for long-term maintenance and management responsibilities will be completed prior to project ground disturbance.*

EFFECTS IN MPAREA 2 AND NON-DEVELOPMENT AREA

No detailed information is currently available regarding the occurrence of special-status plant and wildlife species in MPArea 2 or the Non-Development Area. However, based on their general similarity to MPArea 1 in terms of overall habitat conditions, it is presumed that the potential for both special-status plants and special-status wildlife to be present is similar to that documented for

MPArea 1, with the caveat that the likelihood of special-status species presence is lower in the western portions of the Non-Development Area, which already support residential and other developed uses. Like MPArea 1, MPArea 2 and the Non-Development Area are also presumed to offer nesting opportunities for multiple common birds, and possibly also for special-status bird species.

In this context, it is anticipated that development of MPArea 2 and possible long-term future development of the Non-Development Area, would have at least some potential to affect special-status plants and wildlife, both directly and through habitat modification. This would be particularly true where development involves the currently least-disturbed portions of these areas: the roughly triangular segment of MPArea 2 near the center of the Project area, open areas in the southeast portion of MPArea 2, the undeveloped area north of MPArea 1, and open fields immediately west of MPArea 1 (see Figure 3.4-3). Construction noise and disturbance could also adversely affect nesting birds in MPArea 2 and the Non-Development Area.

Impacts on both special-status species (plants and wildlife) and nesting birds have the potential to be significant. To address these concerns, the City will require implementation of Mitigation Measures 3.4-12 and 3.4-13.

Mitigation Measure 3.4-12 will ensure that the potential for special-status species presence in future development areas is evaluated thoroughly. It will also ensure that future developers obtain any permits necessary for impacts on special-status species (either directly or through habitat modification), and that developers are responsible for implementing conditions required by the permits. As discussed in more detail above for MPArea 1, permit conditions would include the protective measures and/or habitat compensation deemed appropriate by CDFW and/or USFWS.

Mitigation Measure 3.4-13 requires preconstruction surveys for nesting birds—including both common and special-status species—and requires protection of active nests such that the reproductive cycle can be completed and populations are not decreased by construction activity.

With these measures incorporated, impacts of development in MPArea 2 and the Non-Development Area on special-status species and nesting birds of all species would be avoided, reduced, and if appropriate, compensated for consistent with regulatory requirements and current best conservation practices. Residual impacts, if any, are considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-12: *As part of the development planning process(es) for MPArea 2 and the Non-Development Area, the applicant(s) will retain a qualified biologist or biologists to conduct a comprehensive biological resources evaluation (BRE) of the proposed development area(s) and surrounding vicinity. Coverage of the surrounding area will be determined by the biologist(s) based on the best available conservation science for the species with potential to be present, and will be inclusive enough to detect all species with the potential to be affected by disturbance (e.g., due to construction activity) as well as habitat degradation and loss.*

The BRE(s) will address, at a minimum, the following:

- *Types of habitat present and habitat quality*
- *Presence of sensitive natural communities, if any*
- *Presence of wildlife migration or movement corridors, if any*
- *Presence of wildlife nursery sites, if any*
- *Presence, and potential for presence, of special-status plants*
- *Presence, and potential for presence, of special-status fish and wildlife species, including state- and/or federally listed species, as well as species that qualify for other forms of special status under CEQA*
- *General information on location, extent, and quality of potentially jurisdictional wetlands and other waters on and near the site*
- *Resource agency permits/authorizations that may or will be required to authorize development activities*
- *Need for, and topics to be covered in, construction worker awareness training for biological resources, sensitive habitats, jurisdictional resources, and special-status species*

If appropriate in the judgment of the biologist(s), the BRE will recommend follow-up steps, potentially including but not necessarily limited to:

- *Further non-protocol studies of habitat, plants, and wildlife at the site*
- *Protocol-level surveys for special-status plants, conducted in a manner consistent with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (California Department of Fish and Wildlife 2018) or most current equivalent.*
- Protocol-level surveys for special-status wildlife, conducted in a manner consistent with species-specific protocols adopted by CDFW and/or USFWS and current at the time of survey
- *Consultation with state and/or federal resource agencies if listed or candidate species are involved*
- *Measures to avoid, reduce, and compensate for impacts on biological and jurisdictional resources in general, including sensitive natural communities, wildlife movement/migratory corridors, and wildlife nursery sites, consistent with current best conservation science and practices*

- *Measures to avoid, reduce, and compensate for impacts on special-status species and their habitat, consistent with adopted CDFW and/or USFWS protocols current at the time of project entitlement*

The applicant(s) will be responsible for implementing follow-up measures recommended in the BRE, and for obtaining any resource agency permits required to authorize development activities (e.g., state ITP, etc.). The applicant(s) will also be responsible for implementing any permit conditions required by the resource agencies. Permit conditions required by the agencies shall be legally binding. Purchase of any mitigation property, establishment of any necessary conservation easement(s), and finalization of any agreements for long-term maintenance and management responsibilities shall be completed prior to project ground disturbance.

The City will ensure that the recommended measures to avoid, reduce, and compensate for impacts on biological and jurisdictional resources in general, and on special-status species and their habitat—or equally effective alternate measures based on current conservation science—are included as Conditions of Approval for the proposed development.

***Mitigation Measure 3.4-13:** If vegetation removal or trimming, clearing/grubbing, excavation, or grading is to begin during the bird nesting/breeding season (February 1 – September 15), the applicant will retain a qualified biologist to conduct a preconstruction survey for nesting birds. The survey will employ binoculars and will take place no more than 2 weeks prior to the initiation of work. If work is suspended for more than 1 week during the nesting season, re-survey will be required before work is reinitiated.*

If any active nest is found, or nest-building activity is observed, in an area that could be directly affected by project activities, or in a location potentially subject to construction-related disturbance, a no-disturbance buffer zone(s) will be established for nest protection. Buffers will remain in place for the remainder of the nesting season or until the biologist determines that all young have fledged or that the nest has been abandoned. No entry of personnel, equipment, or materials into the no-activity buffer will be permitted without written authorization from CDFW (and if federally protected species are involved, USFWS).

Buffers will be delineated in the field by or under the supervision of the biologist, using temporary construction fencing or another suitable low-impact medium. The size of the buffer zone(s) will be determined by the biologist based on the species involved, their behavior, the amount of vegetative and other screening between the nest and the locations(s) where potentially disturbing activities will be occurring, and, if appropriate, other site-specific factors. The minimum buffer widths will be as follows:

- *500 feet for raptors other than Swainson's Hawk; 0.5 mile for Swainson's Hawk*
- *60 feet for Tricolored Blackbird*
- *50 feet for all other species, unless modified by the biologist based on site-specific observations, as follows*

Buffers may be enlarged by taking into account factors such as the following:

- *Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity*
- *Sensitivity of the nesting species and behaviors of the individual nesting birds*

Impact 3.4-2: Nighttime Lighting Associated with the Project Has the Potential for Adverse Effects on Wildlife (Less than Significant with Mitigation)

EFFECTS IN MPAREA 1, MPAREA 2, AND NON-DEVELOPMENT AREA

The Project would result in extensive urban/suburban development on lands that currently support sparse, semi-rural development or are still undeveloped. As such, it would introduce new sources of nighttime lighting, with the potential for light and glare spill into unlighted areas (see related discussion in Section 3.4-1, Impact 3.1-3). Stationary light sources would include street and parking lot lighting, security lighting for commercial and public facilities, and lighting associated with individual residences and residential complexes. Traffic on new streets in the Project area, and increased traffic on existing roadways, would represent mobile light sources.

Artificial nighttime lighting has the potential to affect wildlife in a number of ways (e.g., Longcore and Rich 2004, Miller 2006, Perry et al. 2008). For instance, nighttime lighting can disrupt the natural light level and photoperiod conditions that govern behaviors such as foraging, thermoregulation, communication (e.g., bird singing behavior, coyote group howling), mating/breeding, and migration. Artificial lighting can also induce phototaxis, a response in which wildlife may either be attracted to the light source (positive phototaxis) or may seek to move away from it (negative phototaxis); in both cases, wildlife may be temporarily blinded and/or disoriented. Birds may become trapped and unable to leave lighted areas, and the risk of collisions with structures and/or other birds can be elevated. Blinded or disoriented wildlife are also at greater risk from natural predators and societal hazards such as roadway traffic.

The nature of the light source can also be important for impacts on wildlife. The spectrum emitted by high-pressure sodium lights includes ultraviolet wavelengths that attract moths; low-pressure sodium lights of the same intensity lack the ultraviolet component and thus do not. Effects of sodium lighting extend beyond the moth species involved to the other species that prey on them, such as bats and birds. Similarly, mercury vapor light sources interfere with some moths' ability to detect the ultrasonic chirps used by bats for echolocation and thus can increase moth predation (Longcore and Rich 2004).

The City's Municipal Code sets limits on outdoor light source intensity and require that light sources be shielded to control light spill. However, it does not restrict the types of light sources that may be used, and does not set limits for total light generation in areas of new development, which reflects the aggregate of multiple sources. Moreover, some species may be sensitive to increases in light well below current City limits on individual source intensity—for instance, some salamanders have

been shown to respond to increases on the order of 10^{-4} – 10^{-2} lux (roughly 0.0001 – 0.01 foot-candle) (Perry et al. 2008).

In this context, it is prudent to acknowledge that wildlife could be affected by increased nighttime lighting associated with Project development. Both common and special-status species are potentially subject to these effects; depending on the extent of behavior alteration, there is potential that impacts could rise to a level considered significant under CEQA, particularly if

- breeding/mating behavior is disrupted to the extent local population levels are decreased
- predation or injury/mortality due to societal causes such as traffic is increased to the extent that local population levels are decreased

At a larger scale, the "full moon" effect of artificial nighttime lighting may favor species that are more light-tolerant, and put food supply for species that rely on darkness for foraging at risk. By reducing the success of some species and increasing opportunities for others, this has the potential to alter local ecosystem structures (Longcore and Rich 2004). Depending on the extent of any ecosystem effects, it is also possible this could also represent a significant impact affecting both common and special-status species.

The Project's impacts—that is, any changes from baseline biological conditions due to species-level and/or ecosystem effects of increased lighting associated with the Project—have the potential to be greatest in the portions of the Project area that are farthest from existing developed areas and roadways and are thus least affected by nighttime lighting under current conditions. This includes the northeastern portion of MPArea 1, MPArea 2, and the undeveloped northern portion of the Non-Development Area. Impacts—i.e., changes from the existing baseline level of biological impact—in the western portion of the Non-Development Area, where existing semi-rural and suburban development is already present and the baseline of existing lighting impacts is presumably greater, would be smaller but could nonetheless have the potential to be significant.

To address this, the City will require implementation of Mitigation Measure 3.4-14. With this measure incorporated, impacts related to increased nighttime lighting and fugitive light/glare would be reduced in accordance with current best design practices and CDFW guidance as expressed in the December 4, 2023 NOP comment letter. Residual impacts, if any, are considered less than significant.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-14: *The following measures will be required of all development in the Project area to avoid and reduce impacts of nighttime lighting and fugitive light/glare on wildlife. Development applicants will be responsible for implementing all measures; the City will enforce measures as Conditions of Approval under the entitlements process. With prior written approval from CDFW and USFWS, equally protective measures may be substituted.*

- *No lighting will be installed in protected open space areas; lighting on parcels adjacent to open space—whether protected or not—will be limited to the minimum needed for public safety*
- *Public exterior lighting will be equipped with full cut-off shielded luminaires to reduce light spill*
- *Use of uplights on buildings will be prohibited, and use of uplighting in general will be discouraged, with the exception of low-voltage, low-lumen output uplighting on trees in public spaces*
- *Exterior light fixtures in both public and private spaces will be mounted as low as possible while still providing for safety*
- *Lighting sources will be restricted to those that provide good color rendering such as light-emitting diodes (LEDs) and metal halide lamps; no use of high- or low- pressure sodium lamps or mercury vapor lamps will be permitted*

Impact 3.4-3: The Proposed Project Has the Potential to Result in Adverse Effects on Sensitive Natural Communities (Less than Significant with Mitigation)

This analysis addresses sensitive natural communities other than wetlands, such as riparian habitat. Impacts on wetlands are discussed separately in Impact 3.4-4 below.

EFFECTS IN MPAREA 1

No sensitive habitats other than wetlands are present in MPArea 1. With no sensitive natural communities present, development of MPArea 1 would have **no impact** on such communities. No mitigation is required.

EFFECTS IN MPAREA 2 AND NON-DEVELOPMENT AREA

As noted above, detailed information on biological resources within MPArea 2 and the Non-Development Area is not currently available. There could thus be some potential for development in these areas to affect sensitive natural communities if any are present, and depending on the extent of loss, it is possible that impacts could rise to a significant level. However, implementation of Mitigation Measure 3.4-12, described above, would ensure that any sensitive natural communities in these areas are identified as part of the planning process for future development. Implementation of Mitigation Measure 3.4-15, described below, would provide a mechanism to avoid impacts where this is possible, and to compensate for impacts that cannot be avoided. With these measures in place and enforced through the City's entitlements process, impacts would be reduced to a less than significant level. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-15: *Sensitive natural communities—i.e., natural communities/vegetation types ranked S1 – S3 in CDFW's California Natural Community List and any identified in local or regional planning documents as sensitive and meriting protection—will be avoided and protected in place where this is possible without significant loss of habitat function and value. If losses cannot be avoided, or if habitat value would be substantially decreased due to loss of connectivity or proximity to proposed development, compensatory habitat mitigation will be required. Mitigation will be provided by the development applicant, in a manner consistent with current prevailing conservation practice and any applicable CDFW guidelines. Mitigation commitments will be enforced by the City as Conditions of Approval for development.*

Impact 3.4-4: The Proposed Project Has the Potential to Result in Adverse Effects on Wetlands (Less than Significant with Mitigation)

EFFECTS IN MPAREA 1

Temporary Impacts during Construction

Figure 3.4-3 shows the jurisdictional wetlands and other waters within MPArea 1. As discussed in more detail under Section 2.0 Project Description, the applicant has configured the proposed development layout for the Vista Ranch project to avoid wetlands to the extent feasible, with remaining wetlands surrounded by protected open space.

However, construction within MPArea 1 would involve extensive ground disturbance, with the potential to increase delivery of sediment to wetlands intended for protection. Construction would also involve the use of multiple substances—such as vehicle and equipment fuels and lubricants, cement, paints, adhesives, and paving media—that could degrade water quality and wetland function if spills or releases occur. In addition, there would be potential for accidental incursions into wetland areas by equipment and personnel, potentially resulting in direct disruption of wetland geomorphology and hydrology

As discussed in the *Hydrology and Water Quality* section (see Impact 3.9-1), individual project phases within MPArea 1 would substantially exceed the 1-acre threshold at which coverage under the State Water Resources Control Board's Construction General Permit is required. This requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) detailing the measures that will be in place to control erosion and sediment runoff and to prevent and respond to spills of potential pollutants. In the extremely unlikely event that construction activities for any portion of MPArea 1 are concentrated on less than 1 acre, those activities would also require Construction General Permit coverage and SWPPP implementation, since they are part of a larger undertaking disturbing more than 1 acre (see discussion in *Regulatory Setting* section above). The State of California requires that SWPPPs be prepared, amended, and certified by a state-certified Qualified SWPPP Developer (QSD), and implemented either by a QSD or a state-certified Qualified SWPPP Practitioner (QSP). With the SWPPP requirement in place, impacts related to wetland degradation

during construction would be avoided and reduced consistent with regulatory requirements and current best practices, and are considered less than significant.

Wetland Losses

As identified above, the applicant has configured the proposed development layout for the Vista Ranch project to avoid wetlands to the extent feasible (Figure 3.4-5 and 3.4-6). However, it is not possible to avoid wetland impacts entirely; a total of just under 0.5 acre of wetlands would be filled or removed as a result of development, as itemized in Table 3.4-8. With the exception of minor temporary disturbance in the wetland margins of the Outlet Channel, which may be necessary for construction of the new bridge connecting development in the east and west portions of MPArea 1 and would be restored following construction, all of these impacts would be permanent. Impacts would be incurred progressively over about the next 10 years, as MPArea 1 moves in phases toward full build-out. As permanent losses of jurisdictional wetlands, these impacts are considered significant under CEQA.

TABLE 3.4-8. WETLAND IMPACTS DUE TO MPAREA 1 DEVELOPMENT

WETLAND TYPE	*ACRES IMPACTED*	
	PERMANENT LOSS	*TEMPORARY DISTURBANCE*
Outlet Channel, wetland channel and fringing wetland margin	0	0.003
Depressional wetland basin	0.061	0
Stockpond	0.434	0
Total wetland impact:	0.495	0

Source: Vollmar Natural Lands Consulting 2023b

Because impacts on jurisdictional wetlands and other waters are anticipated, the MPArea 1 applicant has applied for a Clean Water Act Section 404 permit from the Corps and will also be applying for Clean Water Act Section 401 Water Quality Certification from the RWQCB and entering into a Streambed Alteration Agreement with CDFW. As discussed above under Impact 3.4-1, the applicant proposes to compensation for impacts on special-status species habitat under the state ITP and federal interagency consultation processes by dedicating extensive conservation lands in the Four Corners area near Madera. In addition to uplands, the proposed mitigation Property supports a robust network of vernal pool/vernal swale complexes, ephemeral streams, and a seasonal stream corridor. All of these resources are in substantially better condition and offer greater ecological function and value than the existing wetlands within MPArea 1 (Redtail Consulting 2023, 2024).

The resource agencies (Corps, RWQCB, and CDFW) may accept preservation of aquatic resources at the mitigation site as compensation for wetland impacts due to development of MPArea 1. If the agencies determine that preservation is inadequate as compensation, the applicant will likely be required to purchase aquatic resources credits from an agency-approved mitigation bank serving the Project area in addition to preserving lands as compensation for losses of special-status species habitat. In either case, the agency-approved mitigation approach would be required to be in place (conservation lands acquired and placed under conservation easement and/or mitigation credits purchased) prior to ground disturbance in MPArea 1. This requirement will be enforced through the permit mechanism. To further enforce adherence to the permit process and corollary requirements,

including the provision of compensatory mitigation for wetland losses, the City will require implementation of Mitigation Measure 3.4-16. With this measure in place, impacts on wetlands due to construction in MPArea 1 would be fully offset under resource agency oversight and subject to resource agency approval, and are accordingly considered less than significant. No additional mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-16: *In addition to Clean Water Act Section 404 permitting as required by Mitigation Measure 3.4-3, the MPArea 1 development applicant will complete the Clean Water Act Section 401 permitting process and will enter into a Streambed Alteration Agreement with CDFW per California Fish and Game Code Section 1602, and will obtain the necessary aquatic resources permits from the Corps, RWQCB, and CDFW. The applicant will then be responsible for implementing all permit conditions relative to jurisdictional wetlands and other waters, including AMMs and habitat compensation.*

Over the long term, although the wetlands that are avoided and preserved onsite in MPArea 1 would be buffered by dedicated open space and protected with fencing and signage, there may still be some potential for wetland degradation due to the proximity of development. However, there is currently no buffer in place around these wetlands; they are exposed to the effects of existing developed and agricultural uses, and to other potential future uses in the event the Project does not proceed. Consequently, risks to the health and function of remaining wetlands are not expected to worsen substantially following development, and addition of buffers around remaining wetlands may offer some level of benefit by comparison with current conditions. Long-term impacts on remaining wetlands are therefore considered less than significant. No mitigation is required.

EFFECTS IN MPAREA 2 AND NON-DEVELOPMENT AREA

No detailed information on the presence of wetlands in MPArea 2 and the Non-Development Area is presently available, although some of the wetlands adjacent to the boundaries of MPArea 1 are known to extend into MPArea 2 (Vollmar Natural Lands Consulting 2023a). Detailed analysis of wetland impacts in these areas would therefore be speculative at this time. However, the potential for wetland impacts must be acknowledged. Impacts could include both construction-period degradation as described above for MPArea 1 as well as fill or removal resulting in permanent loss of wetlands.

Wetland losses are considered an inherently significant impact. To address this, the City will require implementation of Mitigation Measure 3.4-17. With this measure incorporated, impacts of future development in MPArea 2 and, over the longer term, in the Non-Development Area, would be avoided to the extent feasible, and unavoidable impacts would be offset consistent with resource agency requirements and are considered less than significant. No further mitigation is required.

MITIGATION MEASURE(S)

Mitigation Measure 3.4-17: *If the Biological Resources Evaluation (BRE) conducted under Mitigation Measure 3.4-12 identifies the presence of wetlands or other waters within either*

MPArea 2 or the Non-Development Area, the applicant(s) proposing development will be required to

- *retain a qualified biologist/ecologist to conduct a preliminary delineation of potentially jurisdictional wetlands and other waters on the development site, consistent with current applicable Corps standards*
- *obtain Corps verification of the preliminary jurisdictional delineation; either Approved Jurisdictional Determination (AJD) or Preliminary Jurisdictional Determination (PJD) is acceptable*
- *avoid wetlands and other waters to the extent feasible during development; if impacts on wetlands and other waters cannot be entirely avoided to the satisfaction of the regulatory agencies (Corps, RWQCB, and/or CDFW), obtain aquatic resources permits to authorize impacts on wetlands/waters as a result of development; and*
- *provide mitigation consistent with resource agency requirements identified and enforced through the permit process*

These requirements will be enforced by the City as Conditions of Approval for all development within MPArea 2 and the Non-Development Area.

Development of MPArea 2 and possible long-term future development of the Non-Development Area is likely to proceed in a manner similar to that planned for MPArea 1—in large-scale phases exceeding the 1-acre threshold at which a SWPPP is required. In this case, construction-period impacts on wetlands would be avoided and reduced as described above for MPArea 1, and would be less than significant, with no mitigation required.

However, if development of any portion of MPArea 2 or the Non-Development Area takes place in phases smaller than 1 acre, SWPPP protections would not be in place, and impacts on wetlands during construction could be significant. To address this, the City will require implementation of Mitigation Measure 3.4-17, described above. With this measure in place, construction-period impacts on any wetlands that may be present and planned to remain within smaller development footprints would be avoided and reduced through implementation of protections like those required under a SWPPP, consistent with regulatory requirements enforced through the permit process. Residual impacts, if any, are considered less than significant. No additional mitigation is required.

Impact 3.4-5: The Proposed Project Has the Potential to Result in Adverse Effects on Wildlife Movement or Migratory Wildlife Corridors (Less than Significant with Mitigation)

EFFECTS IN MPAREA 1

No wildlife movement or migratory corridors have been identified within MPArea 1. Development of MPArea 1 is thus expected to have **no impact** on wildlife movement or migratory corridors. No mitigation is required.

EFFECTS IN MPAREA 2 AND NON-DEVELOPMENT AREA

As discussed in the prior impacts, no detailed information on biological resources within MPArea 2 and the Non-Development Area is currently available. The potential for impacts on wildlife movement or migratory corridors as a result of development in these areas thus cannot be ruled out, and it is possible that impacts could be significant. However, implementation of Mitigation Measure 3.4-12, described above, would

- determine whether MPArea 2 and/or the Non-Development Area support wildlife movement or migratory corridors
- provide an enforceable mechanism to avoid, reduce, and/or compensate for impacts on such corridors if they are present

With this measure in place, impacts on wildlife movement and migratory corridors as a result of development in MPArea 2 and the Non-Development Area would be (1) identified, and (2) avoided or appropriately compensated—for instance, by providing wildlife passage through developed areas or across roadways—and are expected to be less than significant. No additional mitigation is required.

Impact 3.4-6: The Proposed Project Has the Potential to Impede the Use of Wildlife Nursery Sites (Less than Significant with Mitigation)

EFFECTS IN MPAREA 1

Nursery sites are locations or features where animals breed, lay eggs, or rear their young. Depending on the species involved, they can include features as diverse as nest trees, ponds, estuaries, caves, and various kinds of structures.

The only wildlife nursery areas identified in MPArea 1 are the wetlands where California tiger salamander, western spadefoot, and/or large vernal pool branchiopods are known to breed. As discussed in Impacts 3.4-1 and 3.4-3 above, development of MPArea 1 would result in fill/removal of some of these features. This constitutes a significant impact.

However, these losses of habitat are being avoided to the extent possible (see Figure 3.4-5 and Impact 3.4-3), and unavoidable losses as well as long-term decreased utility of the habitat that remains in place would be compensated through the state and federal permit mechanisms described above, as enforced through Mitigation Measures 3.4-3, 3.4-6, and 3.4-7. With this measure in place, impacts on wildlife nurseries due to development of MPArea 1 are expected to be less than significant. No mitigation is required.

EFFECTS IN MPAREA 2 AND NON-DEVELOPMENT AREA

Similar to wildlife movement and migratory corridors, no information on the presence of wildlife nursery areas or features is currently available for MPArea 2 or the Non-Development Area. The potential for impacts on wildlife nurseries as a result of development in these areas thus cannot be ruled out. At worst, it is conceivable, if not reasonably foreseeable, that impacts could be significant. However, implementation of Mitigation Measure 3.4-12, described above, would

- determine whether MPArea 2 and/or the Non-Development Area support wildlife nurseries
- provide an enforceable mechanism to avoid, reduce, and/or compensate for impacts on wildlife nurseries if they are present

With this measure in place, impacts on wildlife nursery as a result of development in MPArea 2 and the Non-Development Area are expected to be less than significant. No additional mitigation is required.

Impact 3.4-7: The Proposed Project Has the Potential to Conflict with Local Policies or Ordinances Protecting Biological Resources (Less than Significant)

EFFECTS IN MPAREA 1

Local Policies

As discussed in the *Regulatory Setting* section above, the current General Plan (City of Clovis 2014) identifies a number of policies relevant to biological resources. These are primarily intended to guide City decision making. However, because City entitlements would be needed for development of MPArea 1 to move forward, they will apply indirectly to the Project insofar as they will inform the City's review. Table 3.4-9 accordingly assesses the consistency of MPArea 1 development as planned under the Project with these policies.

TABLE 3.4-9. CONSISTENCY OF MPAREA 1 DEVELOPMENT WITH GENERAL PLAN POLICIES FOR BIOLOGICAL RESOURCES

POLICY	*CONSISTENCY OF MPAREA 1 DEVELOPMENT*
Land Use Policy 6.2.G: Preserve open space … natural beauty, and critical environmental areas	As shown in Figure 3.4-5 and discussed in Impact 3.4-3 above, the development plan for MPArea 1 has been configured to avoid impacts on wetlands to the extent feasible. Avoided wetlands will be preserved within protected open space, providing natural visual amenities for the new community. Development planning also explicitly prioritizes embracing and capitalizing on natural views of the Sierra Nevada afforded by the site. Development of MPArea 1 as proposed under the Project is therefore consistent with Land Use Policy 6.2.6.
Land Use Policy 6.2.L: Support actions that encourage environmental resource management	As noted above, the proposed development plan for MPArea 1 would avoid impacts on wetlands to the extent feasible. Additionally—as discussed in more detail in Impacts 3.4-1, 3.4-2, and 3.4-3—the applicant proposes to compensate for unavoidable impacts on special-status species, their habitats, and aquatic resources through in-perpetuity preservation of a large tract of high-quality conservation lands in the Four Corners area near Madera, where conservation is an agency-
Open Space and Conservation Policy 2.1: Stewardship. Promote responsible planning and management of land and resources among property owners.	

POLICY	*CONSISTENCY OF MPAREA 1 DEVELOPMENT*
Open Space and Conservation Policy 2.6: Biological resources. Support the protection of biological resources through the conservation of high quality habitat area.	identified priority. To that end, the applicant has been engaged in ongoing discussions with the Corps, USFWS, CDFW, and the RWQCB regarding the extent and configuration of the preserve lands, and the final configuration and management of the preserve will be subject to approval by these agencies under the regulatory permits required to authorize MPArea 1 development. This combination of avoidance and compensation is consistent with Land Use Policy 6.2.L's encouragement of natural resources management, with the responsible planning and management approach mandated by Open Space and Conservation Policy 2.1, and with Open Space and Conservation Policy 2.6's requirement to protect biological resources through conservation of high quality habitat.
Open Space and Conservation Policy 2.7: Native plants. Encourage the use of native and climate-appropriate plant species and prohibit the use of plant species known to be invasive.	The landscape planting palette for MPArea 1 is laid out in the Vista Ranch Master Development Plan (Wilson Premier Homes 2023). Permissible tree species include a mixture of California native species such as western redbud (*Cercis occidentalis*), western sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), Valley oak (*Q. lobata*), and California fan palm (*Washingtonia filifera*) as well as drought-tolerant non-native species like Italian cypress (*Cupressus sempervirens* 'Stricta') and other ornamental species appropriate to the climate and soils of the Clovis area. Permissible shrubs and herbaceous plantings also represent a mixture of native and non-native species suited to the Project area's climates and soils, although the emphasis on non-native species is slightly higher. The majority of the non-native species included on the landscape palette are considered non-invasive. The landscape palette does include two species that appear on the California Invasive Plant Council's (Cal-IPC's) list of invasive species to be avoided for landscaping use (California Invasive Plant Council 2018): European olive (*Olea europaea*) and Bermuda grass (*Cynodon dactylon*). However, the varieties stipulated by the landscape palette are considered non-invasive: the Little Ollie olive (*O. europea* 'Montra') and the Tifdwarf hybrid of Bermuda grass. Landscape planning for MPArea 1 is therefore considered consistent with the requirements of Open Space and Conservation Policy 2.7.

As explained in Table 3.4-9, development of MPArea 1 as planned under the project would be fully consistent with relevant General Plan policies. There would be no impact related to conflict with General Plan policies, and no mitigation is required.

Local Ordinances

As discussed in the *Regulatory Setting* section above, the only local ordinance relevant to biological resources is the City's Tree Protection Ordinance, which requires permit authorization for removal of certain trees (e.g., heritage trees and tree plantings required as conditions of approval under a development or building permit), and can also require replacement plantings.

No heritage trees have been identified within MPArea 1, none of the extant trees on the site were planted as a result of prior development or building approvals, and none of the trees are parkway or public property trees. Some of the trees that would need to be removed for development in this area may qualify as trees on developed single-family properties and could thus be exempt from permit requirements under the Tree Protection Ordinance.

However, some of the trees planned for removal may trigger the City permit requirement based on their size. This will be addressed during the entitlements process, with extensive landscape plantings provided as laid out in the Vista Ranch Master Development Plan, which is subject to City review and approval. In this context, the proposed development of MPArea 1 is considered consistent with the Tree Protection Ordinance. There would be no impact related to conflict with City ordinances protecting biological resources, and no mitigation is required.

EFFECTS IN MPAREA 2 AND NON-DEVELOPMENT AREA

Local Policies

At this time, no development planning has been carried out for MPArea 2 or the Non-Development Area. Detailed analysis of the consistency of future development in these areas with City policies protecting biological resources would therefore be speculative, and thus inconsistent with *CEQA Guidelines* §15145. However, it is reasonably foreseeable that any future development in MPArea 2 and the Non-Development Area would undergo a review and entitlements process similar to that now in progress for entitlement and development of MPArea 1. Such a process would entail evaluation of consistency with all relevant City policies, and would afford a mechanism to enforce consistency. With this review, no material impact related to conflict with City policies protecting biological resources is anticipated. Impacts are expected to be less than significant, and no mitigation is expected to be necessary.

Local Ordinances

No heritage trees have been identified within MPArea 2 or the Non-Development Area. Additionally, some of the trees that could conceivably need to be removed for future development in this area may qualify as trees on developed single-family properties and could thus be exempt from permit requirements under the Tree Protection Ordinance.

However, street trees in the area immediately north of E. Shepherd Avenue and west of N. Armstrong Avenue may be considered parkway or public property trees, and other trees in this area may have been planted subject to development or building permit conditions. Removal of any such trees would require a permit under the Tree Protection Ordinance. Other trees throughout MPArea 2 and the Non-Development Area may be subject to the City permit requirement based solely on their size.

Any development planned for MPArea 2 and the Non-Development Area would be subject to the City entitlements process and as such would undergo a similar level of review to that applied for entitlement of MPArea 1. This would provide a mechanism to enforce the Tree Protection Ordinance as described above for MPArea 1. Consequently, no impact related to conflict with the Tree Protection Ordinance is anticipated due to development in MPArea 2 or the Non-Development Area, and no mitigation is required.

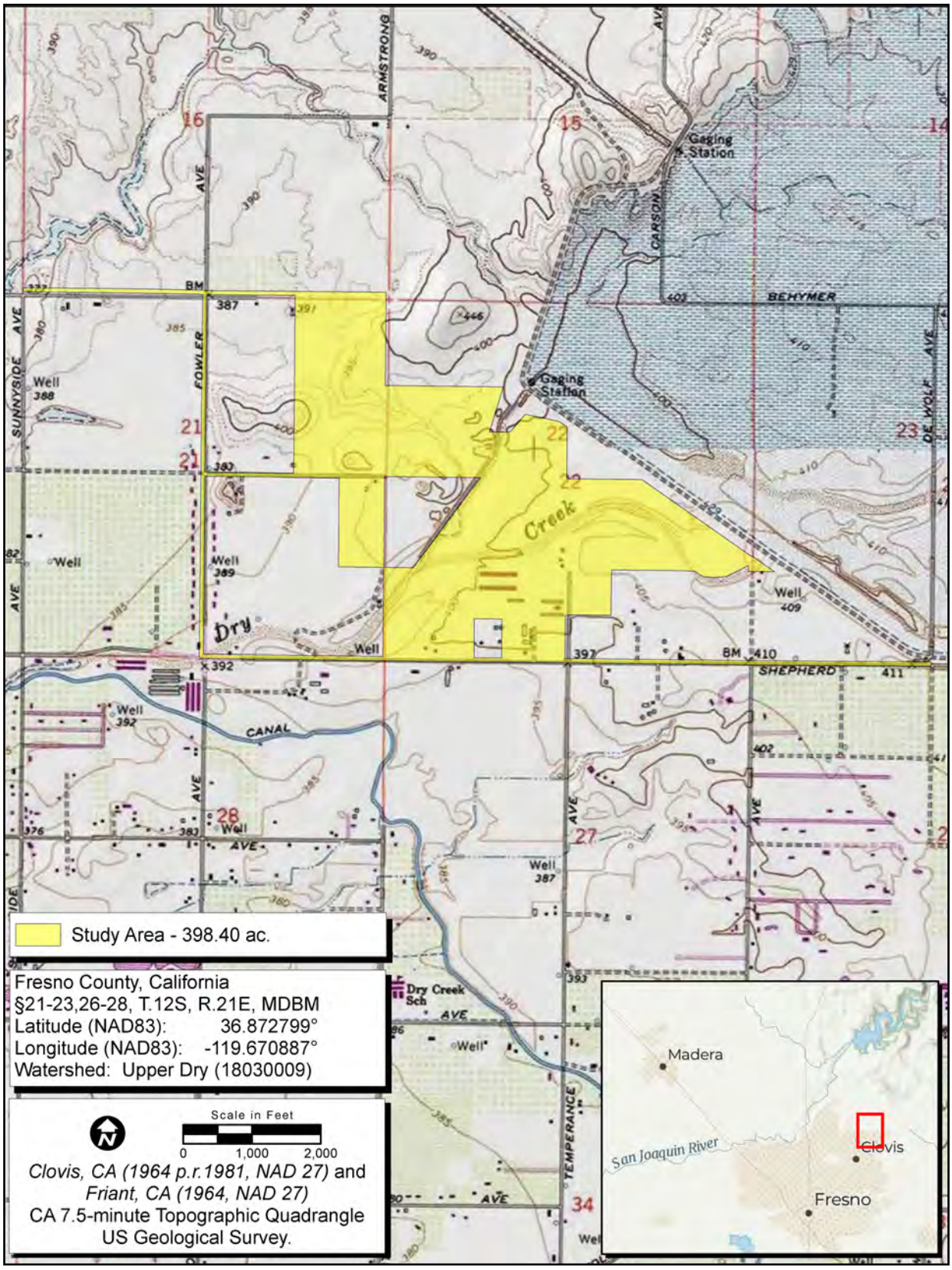
Impact 3.4-8: The Proposed Project Has the Potential to Conflict with an Adopted Conservation Plan (No Impact)

EFFECTS IN MPAREA 1

No adopted conservation plan is currently in place for MPArea 1 at the federal, state, regional, or local level. Consequently, development of MPArea 1 under the proposed Project would have no potential to result in conflict with such a plan. There would be no impact, and no mitigation is required.

EFFECTS IN MPAREA 2 AND NON-DEVELOPMENT AREA

As in MPArea 1, no adopted conservation plan is currently in place for MPArea2 or the Non-Development Area at the federal, state, regional, or local level, and no such plan is known to be in development. Consequently, development of MPArea 2, and possible long-term future development within the Non-Development Area, are expected to have no potential to result in conflict with such a plan. No impact is anticipated, and no mitigation is required.

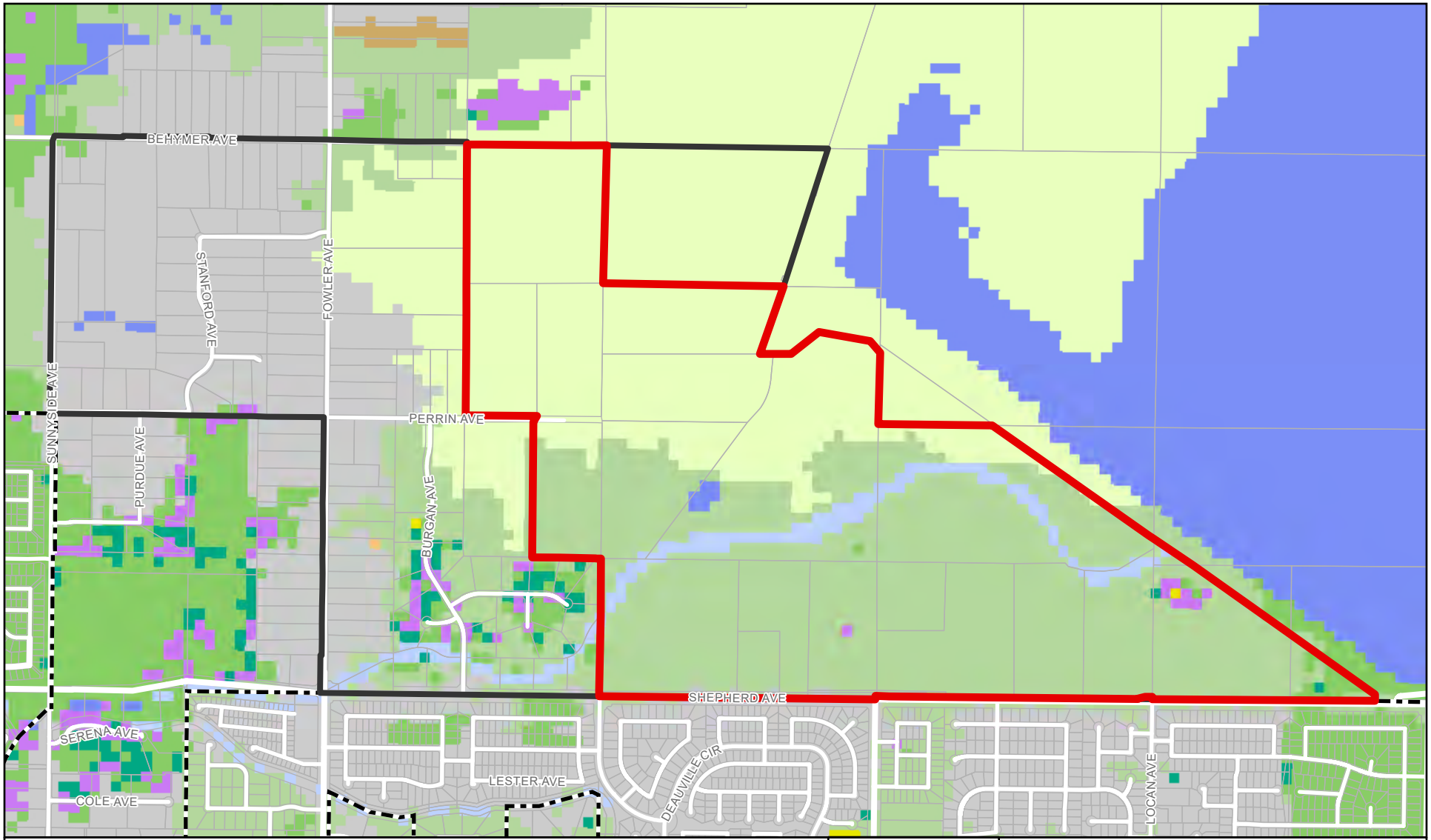


CITY OF CLOVIS - VISTA RANCH

Figure 3.4-1. Study Area Location and Vicinity

Source: ECORP Consulting, Inc. 1-12-2023
Map date: March 8, 2024.

This Page Intentionally Left Blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits
- Annual Grassland
- Barren
- Deciduous Orchard
- Dryland Grain Crops
- Evergreen Orchard
- Irrigated Hayfield
- Irrigated Row and Field Crops
- Lacustrine
- Riverine
- Urban
- Vineyard

N

0 500 1,000

US Feet

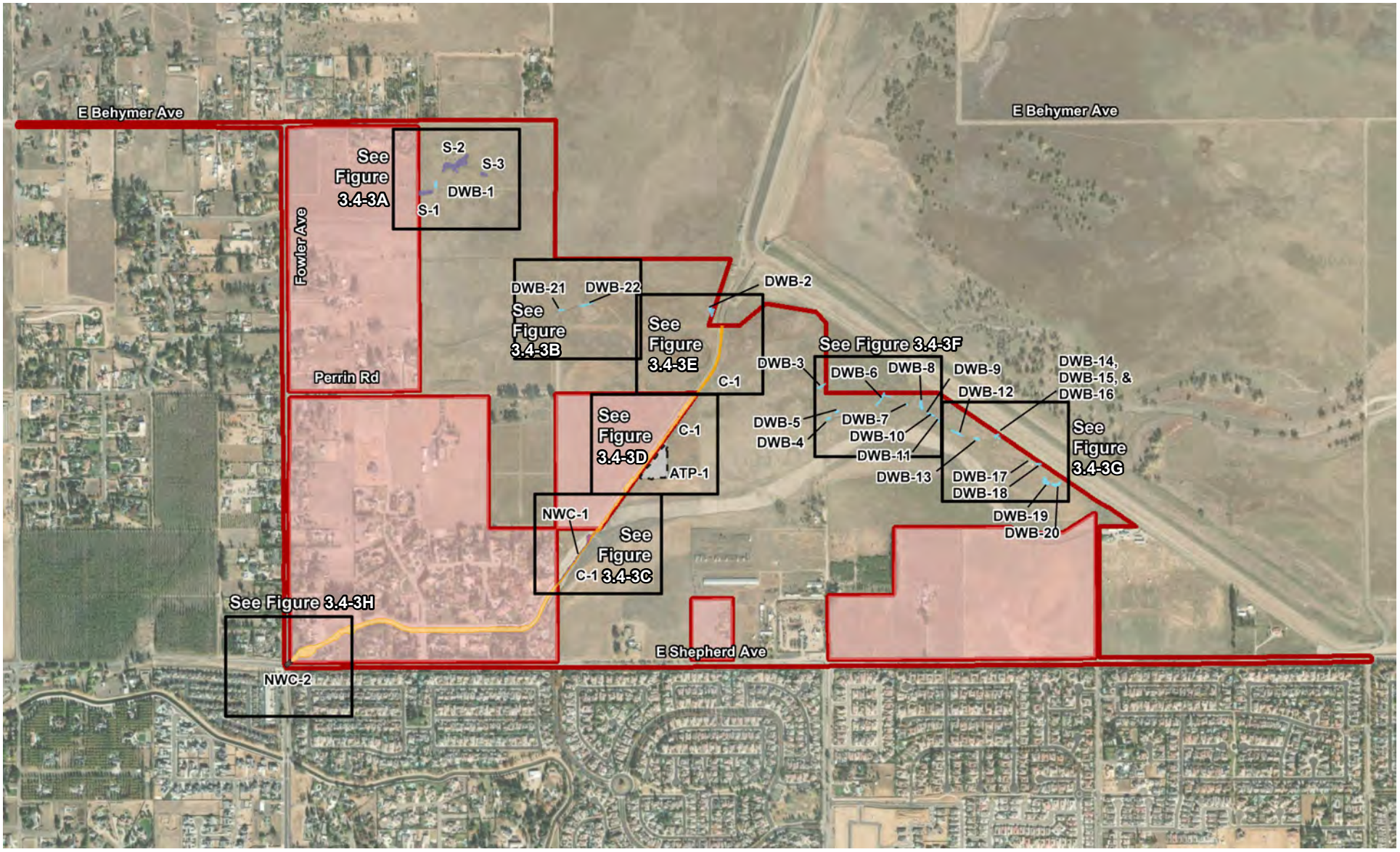
Sources: FRAP Vegetation (fveg15_1) dataset; Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 3.4-2. Land Cover Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



Detail Map Extent
Study Area (397.5 ac.)
Not Part of Study Area

N

unknown scale

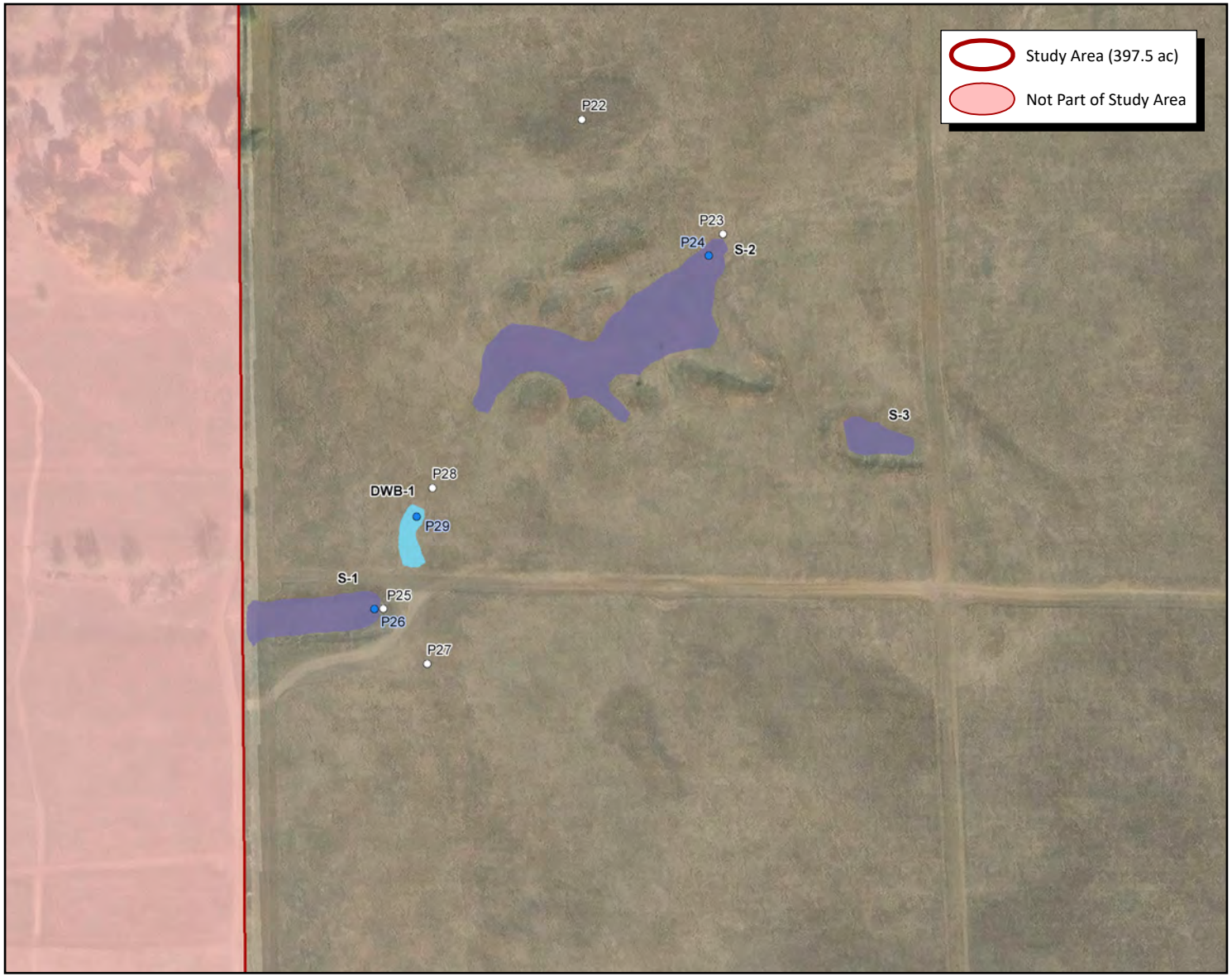
Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 11, 2024.

CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3. Overview Map of Potential Jurisdictional Aquatic Resources Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3A. Detail Potential Jurisdictional Aquatic Resources Map

Map A

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.

Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

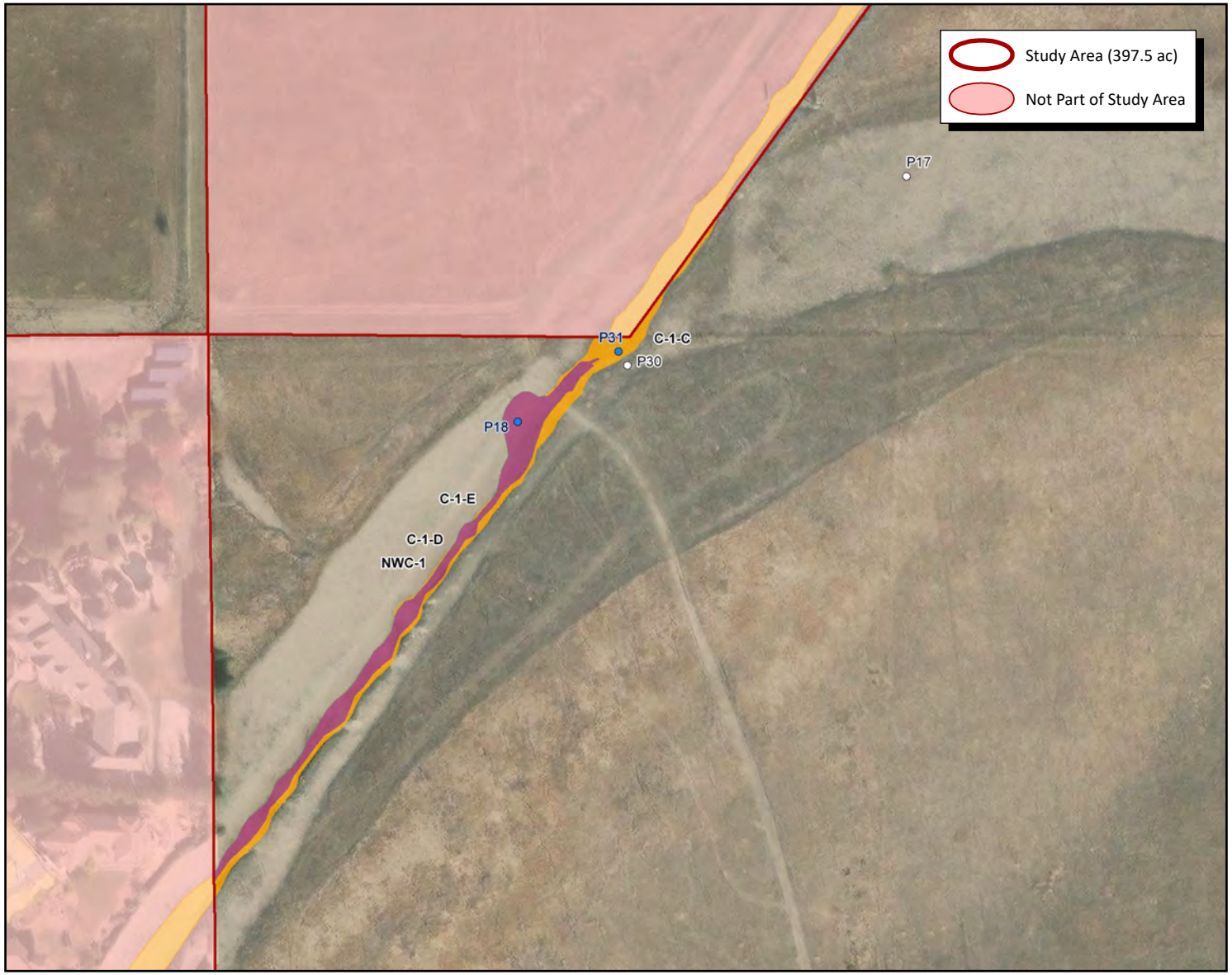
CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3B. Detail Potential Jurisdictional Aquatic Resources Map

Map B

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3C. Detail Potential Jurisdictional Aquatic Resources Map

Map C

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.

Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3D. Detail Potential Jurisdictional Aquatic Resources Map

Map D

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.

Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

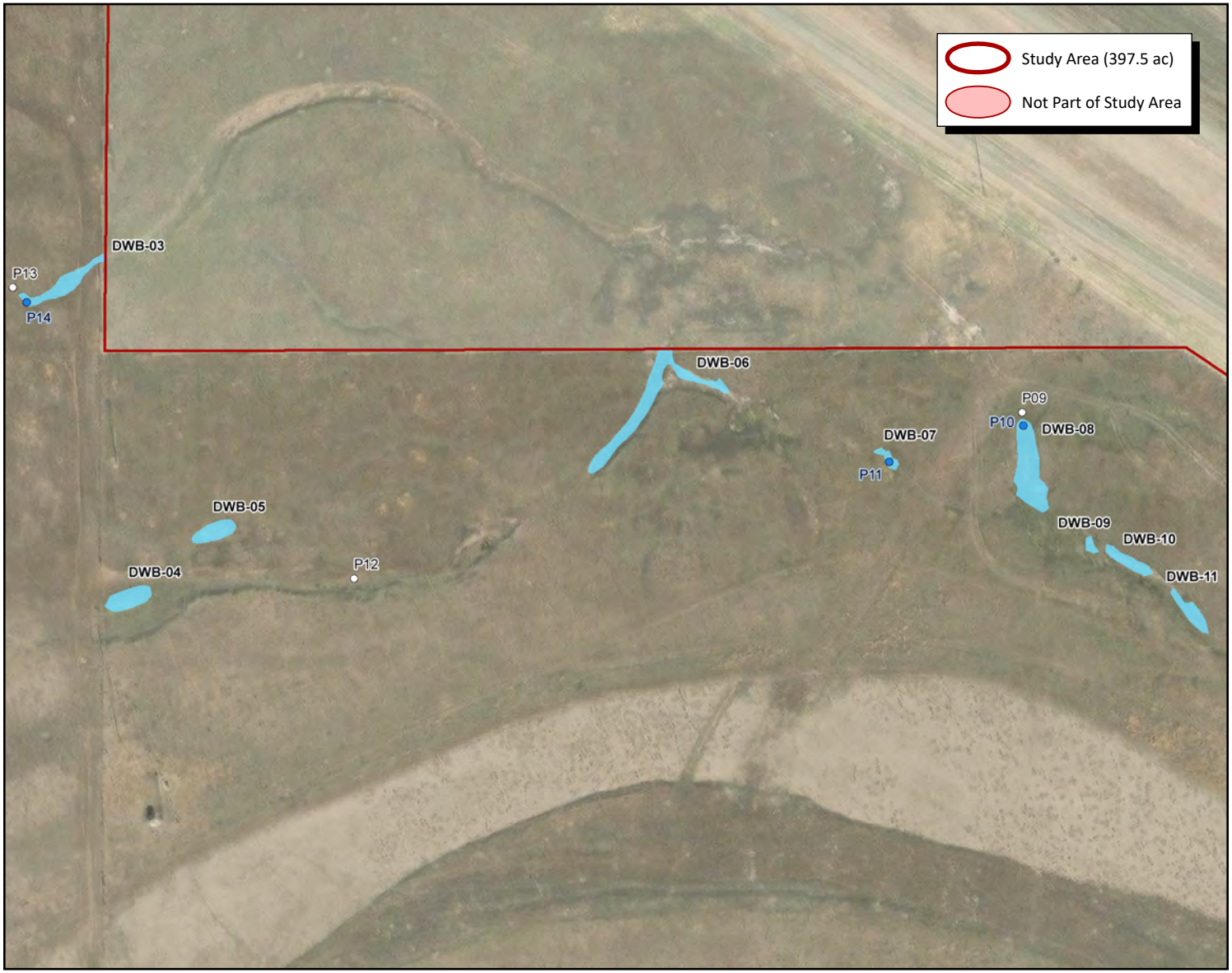
CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3E. Detail Potential Jurisdictional Aquatic Resources Map

Map E

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3F. Detail Potential Jurisdictional Aquatic Resources Map

Map F

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.

Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

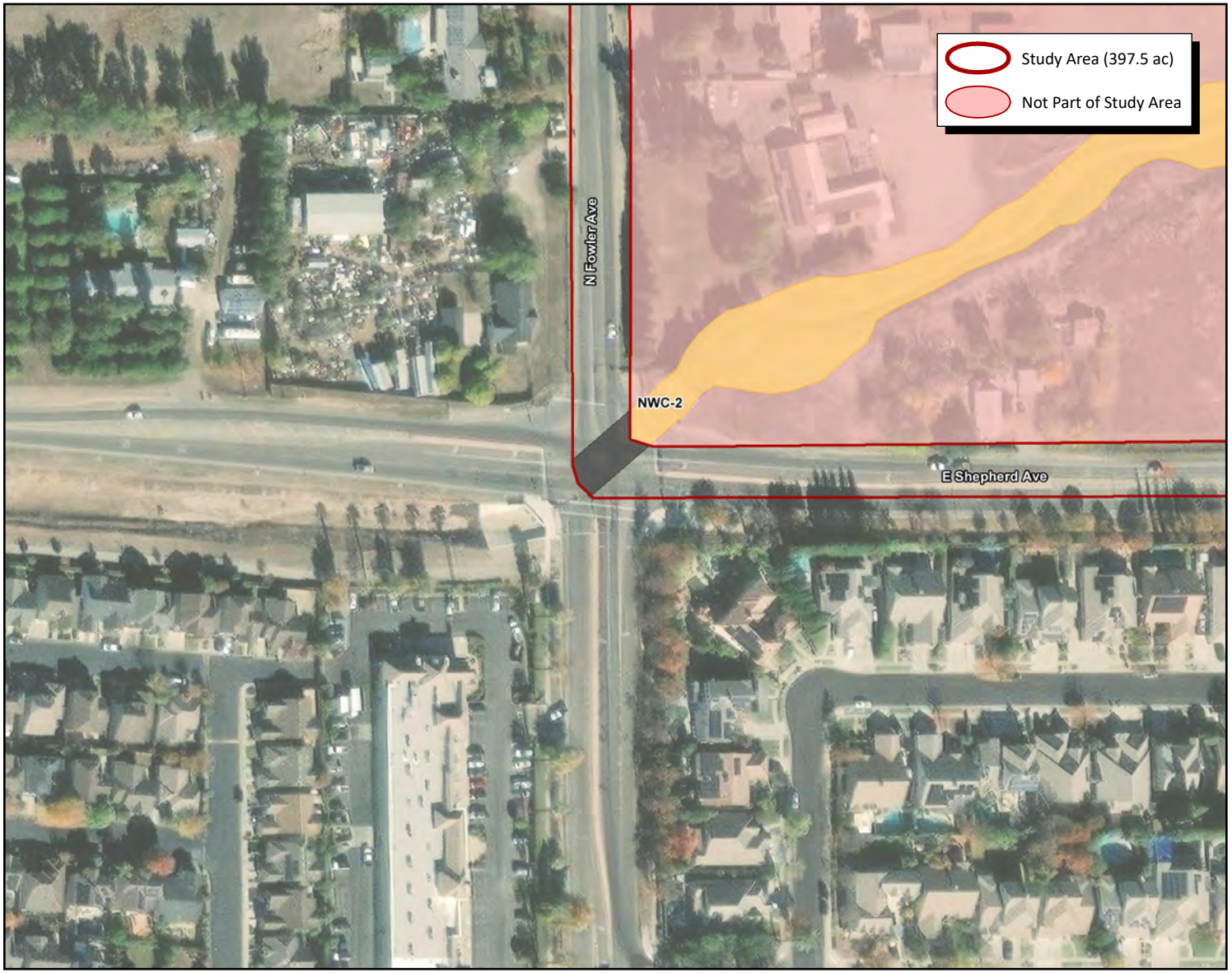
CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3G. Detail Potential Jurisdictional Aquatic Resources Map

Map G

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



Wetland Delineation Data Point

- Delineation Data Point (Upland)
- Delineation Data Point (Wetland)
- Culvert

Potential Jurisdictional Aquatic Resources*

- Wetland; Depressional Wetland Basin (0.559 ac)
- Wetland; Stockpond (0.545 ac)
- Wetland; Canal (Wetland Channel and Fringing Margin) (0.542 ac)
- Other Waters; Canal (Non-Wetland Channel) (0.210 ac)
- Other Waters: Culvert (Non-Wetland Channel) (0.068 ac)
- Canal (Outside Study Area) (0.858 ac)

Features Which May Not be Jurisdictional*

- Agricultural Tailwater Pond (1.129 ac)

** note: acreages shown are for entire study area*

Source: Vollmar Natural Lands Consulting 8-16-2023
Map date: March 8, 2024.

N

unknown scale

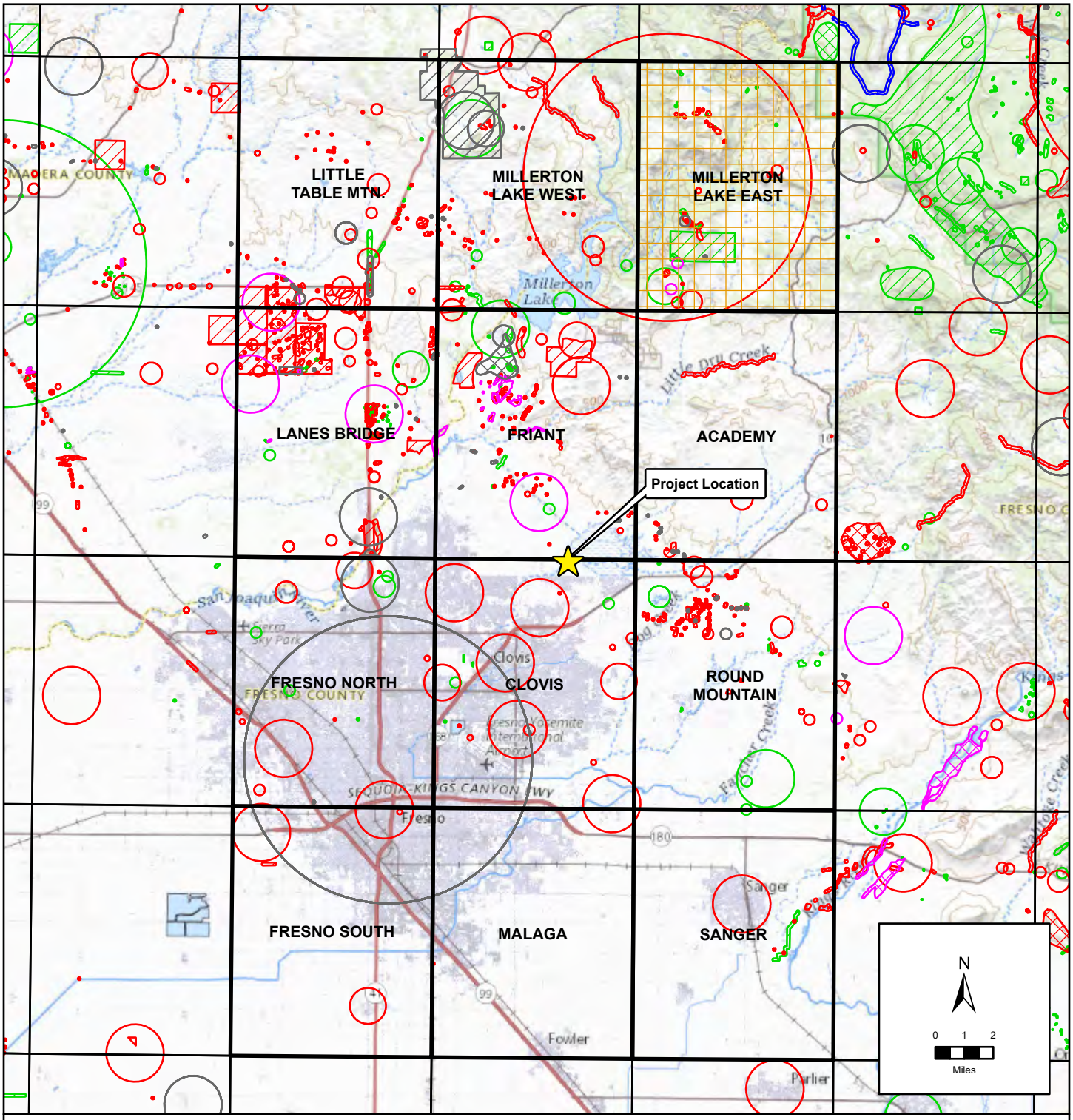
CITY OF CLOVIS - VISTA RANCH

Figure 3.4-3H. Detail Potential Jurisdictional Aquatic Resources Map

Map H

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



LEGEND

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)

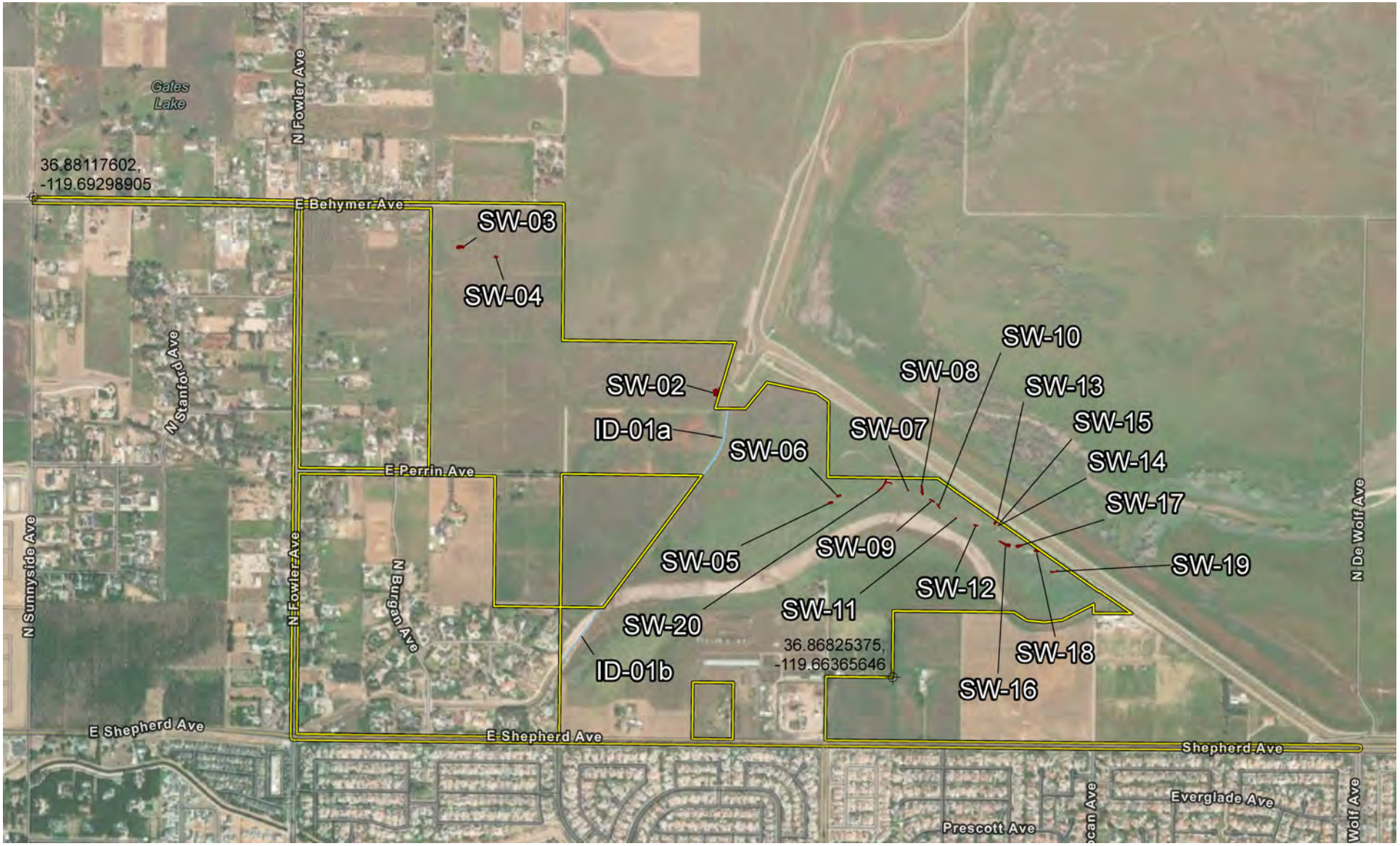
SOI Expansion Vista Ranch

Figure 3.4-4: CNDDB Map
12-quad Search

Sources: ArcGIS Online USA Topo Map Service; CNDDB version 2/1/2024. Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Map date: February 28, 2024.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.



Overall Study Area - 398.40 ac.

Reference Coordinate

Aquatic Resources - 0.806 ac.

Intermittent Drainage - 0.370 ac.

Seasonal Wetland - 0.436 ac.

Source: ECORP Consulting, Inc. 8-31-2023
Map date: March 8, 2024.

N

unknown scale

CITY OF CLOVIS - VISTA RANCH

Figure 3.4-5. Aquatic Resources Assessment

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This Page Intentionally Left Blank.

Canal (non-wetland channel) (0.210 ac)
Canal (wetland channel and margin) (0.542 ac)
Depressional wetland basin (0.559 ac)
Stockpond wetland (0.545 ac)
Canal outside study area (0.858 ac)
Culverted canal flow (0.068 ac)
Agricultural tailwater pond (1.129 ac)
Project site, including potential offsite improvements

N

unknown scale

Source: Redtail Consulting/Vollmar Natural Lands Consulting 2023a
Map date: March 8, 2024.

CITY OF CLOVIS - VISTA RANCH

Figure 3.4-6. Aquatic Resources on Project Site

This Page Intentionally Left Blank.

This section provides a discussion of the cultural and historic setting relative to the Project site, followed by known cultural and tribal resources in the vicinity. This section concludes with an evaluation of the Project's potential impacts on cultural and tribal cultural resources, and provides recommendations for mitigating impacts as needed.

Information in this section is derived primarily from the *Cultural Resources Inventory Report, Triangle Property Project, Fresno County, California,* prepared by ECORP Consulting, Inc. and dated January 2023; refer to Appendix E.

The Notice of Preparation (NOP) for the proposed Project was sent to the Native American Heritage Commission (NAHC) for review and comment. On October 24, 2023, the NAHC provided comments on the proposed Project; refer to Appendix A. No other comments were received during the public review period for the NOP related to cultural or tribal resources.

3.5.1 ENVIRONMENTAL SETTING

METHODOLOGY

A Cultural Resources Inventory Report (Cultural Resources Report) was prepared for the Project site; refer to Appendix E. The Cultural Resources Report provides a cultural context, evaluates cultural and tribal resources within the site and vicinity, and identifies measures to reduce potential adverse impacts of the Project. The Cultural Resources Report is the primary information source used for this Environmental Setting section, unless otherwise noted.

PROJECT SETTING

The Project site is located directly north of the City limit line in unincorporated Fresno County. The Project site consists of approximately 952 acres located within the City's Planning Area and is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues. The site is characterized as flat to gently sloping southerly and westerly.

The Cultural Resources Report evaluated the Area of Potential Effects (APE) for the proposed Project. The APE consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the Project. The horizontal APE consists of all areas where activities associated with a project are proposed; the vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. The APE includes 398.40 acres of the proposed Project site.

CULTURAL AND HISTORICAL SETTING

Cultural Context

REGIONAL PRECONTACT HISTORY

It is generally believed that human occupation of California began at least 10,000 years before present (BP). The archaeological record indicates that between approximately 10,000 and 8,000 BP, a predominantly hunting economy existed, characterized by archaeological sites containing numerous projectile points and butchered large animal bones. Animals that were hunted probably consisted mostly of large species still alive today. Bones of extinct species have been found but cannot definitively be associated with human artifacts. Although small animal bones and plant grinding tools are rarely found within archaeological sites of this period, small game and floral foods were probably exploited on a limited basis. A lack of deep cultural deposits from this period suggests that groups included only small numbers of individuals who did not often stay in one place for extended periods.

Around 8,000 BP, there was a shift in focus from hunting toward a greater reliance on plant resources. Archaeological evidence of this trend consists of a much greater number of milling tools (e.g., metates and manos) for processing seeds and other vegetable matter. This period, which extended until around 5,000 BP, is sometimes referred to as the Millingstone Horizon. Projectile points are found in archaeological sites from this period, but they are far fewer in number than from sites dating to 8,000 BP. An increase in the size of groups and the stability of settlements is indicated by deep, extensive middens at some sites from this period.

Archaeological evidence indicates that reliance on both plant gathering and hunting continued as in the previous period, with more specialized adaptation to particular environments in sites dating to after about 5,000 BP. Mortars and pestles were added to metates and manos for grinding seeds and other vegetable material. Flaked-stone tools became more refined and specialized, and bone tools were more common. New peoples from the Great Basin began entering Southern California during this period. These immigrants, who spoke a language of the Uto-Aztecan linguistic stock, seem to have displaced or absorbed the earlier population of Hokan-speaking peoples. During this period, known as the Late Horizon, population densities were higher than before, and settlement became concentrated in villages and communities along the coast and interior valleys. Regional subcultures also started to develop, each with its own geographical territory and language or dialect. These were most likely the basis for the groups that the first Europeans encountered during the 18th century. Despite the regional differences, many material culture traits were shared among groups, indicating a great deal of interaction. The presence of small projectile points indicates the introduction of the bow and arrow into the region sometime around 2,000 BP.

LOCAL PRECONTACT HISTORY

The San Joaquin Valley and adjacent Sierra Nevada foothills and Coast Range have a long and complex cultural history with distinct regional patterns that extend back more than 11,000 years. The first generally agreed-upon evidence for the presence of pre-contact peoples in the region is represented by the distinctive basally thinned and fluted projectile points, found on the margins

of extinct lakes in the San Joaquin Valley. These projectiles, often compared to Clovis points, have been found at three localities in the San Joaquin Valley including along the Pleistocene shorelines of former Tulare Lake. Based on evidence from these sites and other well-dated contexts elsewhere, the Paleo-Indian hunters used these spear points existed during a narrow time range of 11,550 to 8,550 BP.

As a result of climate change at the end of the Pleistocene, a period of extensive deposition occurred throughout the lowlands of central California, burying many older landforms, and providing a distinct break between Pleistocene and subsequent occupations during the Holocene. Another period of deposition, also a product of climate change, had similar results around 7,550 BP, burying some of the oldest archaeological deposits discovered in California.

The Lower Archaic (8,550 to 5,550 BP) is characterized by an apparent contrast in economy, although it is possible that they may be seasonal expressions of the same economy. Archaeological deposits that date to this period on the valley floor frequently include only large-stemmed spear points, suggesting an emphasis on large game such as artiodactyls. Recent discoveries in the adjacent Sierra Nevada have yielded distinct milling assemblages, which clearly indicate a reliance on plant foods. Investigations at Copperopolis argue that nut crops were the primary target of seasonal plant exploitation. Assemblages at these foothill sites include dense accumulations of handstones, millingslabs, and various cobble-core tools, representing “frequently visited camps in a seasonally structured settlement system.” As previously stated, these may represent different elements of the seasonal round. What is known is that during the Lower Archaic, regional interaction spheres had been well-established. Marine shell from the central California coast has been found in early Holocene contexts in the great basin east of the Sierra Nevada, and eastern Sierra obsidian composes a large percentage of flaked-stone debitage and tools recovered from sites on both sides of the Sierra.

About 8,000 years ago, many California cultures shifted the main focus of their subsistence strategies from hunting to nut and seed gathering, as evidenced by the increase in food-grinding implements found in archeological sites dating to this period. This cultural pattern is best known for Southern California, where it has been termed the Millingstone Horizon, but recent studies suggest that the horizon may be more widespread than originally described and is found throughout the region during the Middle Archaic Period. Radiocarbon dates associated with this period vary between 8,000 and 2,000 BP, although most cluster in the 6,000 to 4,000 BP range.

Early Middle Archaic sites are relatively rare on the valley floor. This changes significantly toward the end of the Middle Archaic. In central California, late Middle Archaic settlement focused on river courses on the valley floor. Although rare, these sites did provide evidence of long-term residence consisting of vast amounts of trade objects, specialized tools, and remains of animal and plants found during different seasons of the year. Again, climate change apparently influenced this shift, with warmer, drier conditions prevailing throughout California. The shorelines of many lakes, including Tulare Lake, contracted substantially, while at the same time rising sea levels favored the expansion of the San Joaquin/Sacramento Delta region, with newly formed wetlands extending eastward from the San Francisco Bay.

In contrast, early Middle Archaic sites are relatively common in the Sierra foothills, and the mainly utilitarian assemblages recovered show relatively little change from the preceding period with a continued emphasis on acorns and pine nuts. Few bone or shell artifacts, beads, or ornaments have been recovered from these localities. Projectile points from this period reflect a high degree of regional morphological variability, with an emphasis on local tool stone material supplemented with a small amount of obsidian from eastern sources. In contrast with the more elaborate mortuary assemblages and extended burial mode documented at Valley sites, burials sites documented at some foothill sites such as CA-FRE-61 on Wahtoke Creek are reminiscent of *reburial* features reported from Millingstone Horizon sites in Southern California. These reburials are characterized by reinterment of incomplete skeletons often capped with inverted milling stones.

A return to colder and wetter conditions marked the Upper Archaic in Central California (2,500 to 1,000 BP). Previously desiccated lakes returned to spill levels and increased freshwater flowed in the San Joaquin and Sacramento watershed. Cultural patterns as reflected in the archeological record, particularly specialized subsistence practices, emerged during this period. The archeological record becomes more complex, as specialized adaptations to locally available resources were developed, and valley populations expanded into the lower Sierra foothills. New and specialized technologies expanded, and distinct shell bead types started to occur across the region. The range of subsistence resources utilized expanded significantly from the previous period, as did the exchange systems utilized by the surrounding tribes. In the Central Valley, archaeological evidence of social stratification and craft specialization is indicated by well-made artifacts such as charmstones and beads, often found as mortuary items.

The period between approximately 1,000 BP and European-American contact is referred to as the Emergent Period. The Emergent Period is marked by the introduction of bow-and-arrow technology, which replaced the dart and atlatl at about 1,100 to 800 BP. In the San Joaquin region, villages and small residential sites developed along the many stream courses in the lower foothills and along the river channels and sloughs of the valley floor. A local form of pottery was developed in the southern Sierra foothills along the Kaweah River. While many sites with rich archaeological assemblages have been documented in the northern Central Valley, relatively few sites have been documented from this period in the southern Sierra foothills and adjacent valley floor, despite the fact that the ethnographic record suggests dense populations for this region.

Ethnography

Prior to the arrival of European Americans in the region, indigenous groups speaking more than 100 different languages and occupying a variety of ecological settings inhabited California. Kroeber and others recognized the uniqueness of California's indigenous groups and classified them as belonging to the California culture area. Kroeber further subdivided California into four subculture areas: Northwestern, Northeastern, Southern, and Central.

When the first European explorers entered the regions between 1772 and 1821, an estimated 100,000 people, about one third of the state's native population, lived in the Central Valley. At least seven distinct languages of Penutian stock were spoken among these populations: Wintu, Nomlaki, Konkow, River Patwin, Nisenan, Miwok, and Yokuts. Common linguistic roots and similar

cultural and technological characteristics indicate that these groups shared a long history of interaction. The Central area (as defined by Kroeber) encompasses the APE and includes the Yokuts.

Ethnographically, predominant Native American group occupying the region at the time of European contact in the late 18th century was the Penutian-speaking Yokuts. The Yokuts, (meaning *person* or *people*) Penutian/Yokutsan speakers, were divided into three distinct groups: the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothills Yokuts. These groups spoke different dialects and were separated by topography. Of the three groups, the Southern Valley Yokuts territory encompasses the APE. The southern San Joaquin Valley was originally covered by sloughs and marshes surrounding three shallow lakes: Tulare, Buena Vista, and Kern. The lakes were fed by rivers coming from the Sierras such as the Kern River. Areas away from the lakes, rivers, and sloughs were dry since the valley receives less than 10 inches of rain per year. The Southern Valley Yokuts obtained fish, freshwater mussels, turtles, and waterfowl from the lakes and marshes. Fishing was carried out year-round. Elk and pronghorn antelope were hunted from blinds when they came to the lakes to drink. Grass and tule seeds were important plant foods. Since there were no oak trees on the valley floor, acorns were not an important food.

The Yokuts lived in villages occupied year-round near lakes, sloughs, and rivers. However, groups of people left the village and lived in temporary camps while collecting seeds in the spring. Single family houses consisted of wood frames covered with tule mats. There were also large multi-family communal residences that were long mat-covered rectangular structures with steep pitched roofs. These structures were divided into sections so that each family had their own fireplace and door. A shade porch, where cooking took place, ran along the front of the building. Seeds, roots, and dried fish were stored in mat-covered granaries raised off the ground. Each village also had an earth-covered sweathouse for use by men. Tule was used to make baskets and cradles. Wood and stone were obtained through trade with groups outside the valley. Marine shells obtained from coastal people were made into beads by the Yokuts. Clamshell disks circulated as primitive money and *Olivella* beads and abalone pendants were strung for necklaces. Canoes and rafts made of tule were used for water transport.

The Southern Valley Yokuts were organized in territorial tribelets with an average population of 350 people. Each tribelet spoke a different dialect and claimed the resources within its territory. Each tribelet had a chief who belonged to the Eagle lineage. There was usually more than one village in a tribelet territory.

Historical Background

REGIONAL HISTORY

Spanish maritime explorer Juan Rodriguez Cabrillo and his crewmembers became the first Europeans to visit California when they sailed north from Mexico, in 1542. Sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage, Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. In 1579, the English privateer Francis Drake set anchor somewhere along the coast of northern California and interacted with

local Native American groups. Sebastian Vizcaíno, sailing north from Mexico, explored the California coast as far north as Monterey Bay, in 1602.

The colonization of Alta California began in 1769, when Spanish army captain Gaspar de Portolá and Junipero Serra, a Franciscan missionary, led a large party up the California coast by land from San Diego Bay to Monterey Bay. Along the coast they established a chain of Spanish missions, presidios (forts), and pueblos (towns). Franciscan friars eventually built 21 missions in California, beginning with Mission San Diego, in 1769, and ending with missions in San Rafael and Sonoma, in 1823. The missions sought to convert California's Native American groups to Catholicism. Franciscans missionaries also planted California's earliest orchards, vineyards, and vegetable gardens and raised cattle. All missions made use of unpaid Native American labor. Presidios at San Diego, Santa Barbara, Monterey, and San Francisco housed Spanish military personnel, who guarded California's best harbors. Pueblos at Los Angeles, San Jose, Branciforte (near what is now Santa Cruz), and Sonoma housed civilian farmers who cultivated grain for the presidios. No missions, presidios, or pueblos were established in California's Central Valley. The region remained a *terra incognita* until Gabriel Moraga and his party explored the valley, from 1803 to 1806. In 1827, American trapper Jedediah Smith arrived in the San Joaquin Valley to meet other trappers of his company who camped there, but the fur trappers established no permanent settlements in the Central Valley.

Spanish rule over California ended when Mexico achieved independence from Spain, in 1821. The new Republic of Mexico sought to secularize California's missions after 1833. Former mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches called *ranchos*. During California's Mexican period (1821 to 1848), millions of acres of grazing lands along the California coast and in the Central Valley became privatized. Some rancho owners built homes in settlements that developed around former missions, presidios, and pueblos; others lived in rural haciendas. Cattle became California's leading export. At San Diego, Santa Barbara, Monterey, and other harbors, rancho owners traded cow hides and tallow for manufactured goods imported from Britain, New England, and elsewhere. Native Americans provided the ranchos with unpaid labor.

In 1839, John Sutter, a European immigrant, built a fort at the confluence of the Sacramento and American rivers in what is now Sacramento County and petitioned the Mexican governor for a land grant, which he received, in 1841. Sutter built a flour mill and grew wheat near the fort. Gold was discovered in the flume of Sutter's lumber mill, at Coloma on the South Fork of the American River, in January 1848. The discovery of gold initiated the California Gold Rush, which brought thousands of miners and settlers to the Sierra foothills, east and southeast of Sacramento. The 1848 Treaty of Guadalupe Hidalgo ended the Mexican American War and gave the United States possession of California and other southwestern states. Rapid population increase, prompted by the Gold Rush, allowed California to become a U.S. state, in 1850. U.S. courts confirmed most Mexican land grants, albeit with restricted boundaries, while ungranted lands became federal public lands. Once surveyed into grids of townships, sections, quarter-sections, and quarter-quarter sections under the Public Lands Survey System, California's public lands became available for purchase or for homesteading, under the 1862 Homestead Act.

The California Legislature created Fresno County from parts of Mariposa, Merced, and Tulare counties in 1856. Located in the geographical enter of California, Fresno County consisted of high Sierra Nevada peaks, low rolling foothills, and San Joaquin Valley flatlands. The word *fresno* in Spanish means ash tree, a species that grew in abundance along the San Joaquin River. The County seat, Fresno, was a creation of the railroad. As late as 1870, the site of Fresno remained a hot, dry, barren flatland. In the spring of 1872, the Central Pacific Railroad, building south through the San Joaquin Valley, bridged the San Joaquin River. Through a subsidiary, the Contract and Finance Company, the railroad was surveyed and staked out a grid of streets and blocks, 10 miles south of the river. Rail service to the new town of Fresno commenced in May 1872. Fresno's freight depot immediately attracted the attention of local cattle and sheep ranchers, who happily shipped livestock to San Francisco and other markets on the new railroad. This, in turn, attracted merchants, who bought building lots in town and began establishing businesses catering to ranchers: stables, blacksmiths, saloons, restaurants, general stores, and hotels. The town became the Fresno County seat, in the summer of 1874. By then, Fresno possessed 55 buildings housing a much wider range of services, including physicians and law offices. In 1876, two entrepreneurial residents sank a 100-foot well encased with a seven-inch pipe. Driven by a steam engine pump, the well delivered an abundance of fresh water which sustained Fresno's early growth. By 1890, Fresno's population exceeded 10,000.

Fresno's early growth owed much to the productivity of farms and ranches in the town's immediate vicinity. The *colony* system of development shaped the region. Irrigation was the system's lifeblood and the railroad its lifeline. Before irrigation and the railroad, agriculture in the region's hot, dry, flat plains consisted of open-range grazing and wheat cultivated extensively by a handful of wealthy absentee landowners. In 1869, a Fresno County sheep rancher named Moses J. Church recognized that water could be diverted from the nearby Kings River and sent by canal to the region's dry plains. In 1870, Church built a canal from a headgate on the Kings River and began delivering water 25 miles westward to a wheatfield belonging to A. Y. Easterby, a landowner who lived in Napa. Easterby and other Fresno-area landowners recognized that their wheat fields, under irrigation, possessed speculative value that exceeded the price of wheat. In 1870, Church, partnering with Easterby, Frederick Roeding, and William S. Chapman, established the Fresno Canal and Irrigation Company and solicited capital from San Francisco banks to build a larger water delivery system from the Kings River.

When completed, the Fresno Canal brought irrigation water to the Fresno area's first colony; the Central California Colony. Located three miles south of Fresno and built on a six-square-mile tract owned by Chapman, the Central California Colony was the vision of Chapman's agent, Martin Theodore "M. Theo" Kearney. It consisted of a checkerboard of 20-acre farms, each with an irrigation ditch. After 1872, Central Pacific trains began delivering eager buyers. By 1890, the Central California Colony was home to 150 families. Most grew raisin grapes bought by packing houses in Fresno. Raisins became Fresno's most important cash crop during the late 19th century. During the 1870s and 1880s, the Fresno Canal and Irrigation Company opened a series of new canals, each delivering irrigation water from the Kings River. By the 1890s, scores of new colonies blanketed the region in vineyards and alfalfa fields. Between 1880 and 1890, Fresno County's

population grew from 9,500 to 32,000, much of it centered in and around Fresno and its rural colonies.

PROJECT AREA HISTORY

After 1890, a similar pattern of development occurred in the town of Clovis, eight miles northeast of Fresno. Marcus Pollasky, an eastern railroad promoter, arrived in the area, in 1891, to solicit investors for the new San Joaquin Valley Railroad (SJVRR). The SJVRR intended to build north and east from Fresno. Eventually, it was hoped, the line would cross the Sierra Nevada and provide the San Joaquin Valley with a direct connection to eastern markets. One of the railroad's early investors was Clovis Cole, a large landowner in Fresno and Madera counties. Along the SJVRR route, Cole provided Pollasky with 480 acres for "railroad purposes" and "for the purposes of platting and laying out a town site." In return, the SJVRR established a passenger and freight depot at the site called *Clovis*. The first SJVRR trains arrived at Clovis in the fall of 1891. In 1892, Cole and his associates platted a grid of streets and blocks near the depot and began selling lots to merchants. Early Clovis businesses, like those of early Fresno, catered to farmers and ranchers who arrived at Clovis to ship their livestock and grain on the SJVRR to Fresno. In January 1892, the SJVRR reached Hamptonville (now Friant) but proceeded no further due to financial constraints; later in 1892, the Southern Pacific Railroad (successor to the Central Pacific) acquired the SJVRR at auction.

Clovis owed its existence to industries in town and to agricultural production in its immediate vicinity. In 1894, the Fresno Flume and Irrigation Company completed a 42-mile wooden flume that extended from Shaver, a Sierra Nevada logging camp, to Clovis. At its planing mill in Clovis, Fresno Flume and Irrigation Company produced finished lumber from boards that were floated in from Shaver. On the outskirts of Clovis, Kings River water delivered through the Enterprise Canal irrigated nearby fields. Repeating a pattern established in Fresno, irrigation water and the railroad prompted large landowners near Clovis to subdivide their lands into 20-acre farms marketed as colonies. By 1910, the population of Clovis neared 1,000, as lumber and agricultural production created new business opportunities in town.

The Enterprise Canal formed a geographical boundary in the countryside north of Clovis. On lower-elevation lands south and west of the canal, laterals and ditches irrigated 20-acre farms associated with the Garfield and Nees colonies. On higher-elevation lands located north and east of the canal, a landscape of dry farming and ranching prevailed. This included the ranches of the Mississippi Settlement along Big Dry Creek, an area settled by wheat farmers and cattle ranchers, in the late 1860s. The Mississippi School, a one-room schoolhouse built in 1869 (demolished sometime between 1913 and 1920), formed the nucleus of the settlement. It was located 1,000 feet northeast of the APE. Through 1910, the size of ranches in the Mississippi Settlement generally exceeded those of the 20-acre irrigated farms of the nearby Garfield and Nees colonies. After 1910, as improvements to modern groundwater pumps made irrigation feasible in areas not served by canals, some landowners in the Mississippi Settlement subdivided their ranches into 20-acre farms and marketed them as orchard tracts. However, these tracts did not appeal to buyers. By 1946, only a few homes dotted Shepherd Avenue, south of Big Dry Creek.

Lack of flood control along Big Dry Creek may have deterred settlers. In March 1938, Big Dry Creek and its four tributaries, Little Dry, Dog, Redbank, and Fancher creeks, overflowed their banks after heavy rains. Ranches west of Clovis flooded, destroying orchards and vineyards. Fresno's Fig Garden neighborhood also became inundated; many of its adobe homes "crumpled like cubes of sugar." In 1948, the U.S. Army Corps of Engineers (USACE) built the Big Dry Creek Project immediately east of the APE, in an area that historically encompassed much of the Mississippi Settlement. The Big Dry Creek Project regulated flows on Big Dry Creek, mitigating the risk of flooding downstream. In March 1955, USACE crews completed remedial work to control hill-side erosion at the dam. Only seven months later, the Christmas flood of 1955 put the project to the test. Analysts estimated that the Big Dry Creek Project saved Fresno County property owners $3,000,000 in damages. In 1993, Fresno Metropolitan Flood Control District crews elevated the dam crest by 7.2 feet to increase the reservoir's storage capacity. By the late 20th century, however, the area along Big Dry Creek in the APE remained only sparsely settled with a handful of home ranches.

Architectural Context

THE HOME RANCH

"For the last hundred years," writes geographer Paul F. Starrs, "the fundamental unit of a livestock operation in the western United States has been the home ranch." In California, the home ranch traces its roots to no-fence laws of the 1870s. No-fence laws shifted the burden of building fences from farmers to ranchers, signaling the end of free-range grazing as practiced on California's Mexican-era ranchos. Whereas ranchers previously grazed livestock on California grasses with no regard for property boundaries, after 1870 they began acquiring their own fenced private ranges. The entire operation, called a *home ranch*, included family residences and outbuildings.

Unlike fruit orchards and other types of intensive agriculture where farmers supported families on five, 10, or 20 acres by producing high-value farmed goods, ranching required greater acreage to raise cattle and sheep. "The term *home ranch*," writes Starrs, "asserts viability, a size and substance sufficient to claim permanence and self-reliance." It represented *extensive* agriculture, where supporting a family might require 40 acres or more. Home ranches were characterized by vast open spaces where herds roamed and grazed. If well located, they possessed flowing streams or wells for watering stock and for irrigating fields planted in alfalfa or other forage crops. Spatially, home ranches were also characterized by flexibility; a rancher could add adjoining acreage to increase the size of a ranch or sell off portions when cash was needed.

The nucleus of the home ranch was the headquarters, typically set upon high ground and fronting a rural county road. The headquarters contained the main house for the ranching family. Architecturally, main houses built on home ranches through the first half of the 20th century differed little from houses built in town. They ranged from modest Minimal Traditional-style dwellings and prototypical Ranch-style houses to elaborate revival-style residences. Around the main house stood a cluster of buildings, structures, and landscape features that supported ranching activities. These included barns, corrals, housing for ranch hands, stables for horses, shade trees, water towers, windmills, repair shops, and storage sheds for miscellaneous supplies.

Silos and chicken coops were also common features of home ranches. Many western ranches, particularly those in mountain states, had special enclosures for livestock and poultry, but benign winter weather in California made "light and cheap shelter" sufficient. Animal shelters were, as one 1920s California rancher observed, "frequently dispensed with altogether."

PUBLIC ROADS

During the first half of the 19th century, as the U.S. made western territorial gains, Congress directed Army engineers to establish a network of wagon roads linking western military installations; federal railroad surveyors carried on the work during the 1850s and 1860s. For a generation of overland emigrants and freighters, wagon roads established by federal surveyors pointed the way to California. Many western wagon roads, particularly those that traversed mountain passes, had Native American origins. In California, non-native incursions, such as the de Anza (1774), Portola (1769), and Fremont (1844) expeditions, relied on directions given by Native American guides. The roads established by Spanish and American newcomers linking missions, presidios, pueblos, ranchos, and forts in California often superseded Native American footpaths used for generations.

Overshadowed by railroads, pioneer wagon roads in California and other western states became neglected and degraded during the late 19th century. "By 1900," observes a planning historian, "the nation with the greatest railway system in the world had the worst roads." Interest in road building revived after 1890, as farmers and ranchers, many disillusioned with railroads, began asking county officials for better wagon roads. They were joined by millions of bicyclists who called for smoother roads in town and the countryside. Joining forces, farmers, ranchers, and bicyclists began organizing local, state, and national "good roads" campaigns. In response, the federal government established the Office of Road Inquiry in the Department of Agriculture to study new road building techniques.

Dusty during summer and fall months, muddy through the winter and spring, unimproved wagon roads in California played havoc with horse-drawn vehicles and bicycles. Overcoming mud and dust became the main objective of good roads proponents. Plank roads made from lumber first appeared in California in the 1850s. Gravel roads and macadam, a form of compacted gravel coated with oil, came into use during the late 19th century. Finally, beginning in 1890, concrete roads topped by a mixture of bitumen, aggregate, and sand called *asphalt* became the standard modern road surface. Durable, smooth, and impervious to water, asphalt roads withstood winter weather, reduced vehicular wear and tear, and facilitated better drainage.

The task of grading and paving rural wagon roads initially fell to county boards of supervisors. The most heavily trafficked rural roads, such as those leading to towns, cities, and schools, or those leading to major sites of production, such as large ranches, mines, quarries, and mills, received priority attention. Thousands of other rural roads derived from the Public Land Survey System, the checkerboard of square-mile sections and 36-square-mile townships laid out by federal surveyors to facilitate the sale of western public lands. Because they marked property boundaries, section and quarter-section lines became mutually beneficial roadways for neighboring property owners.

To create roads, property owners forfeited equal strips of land along section lines to counties in exchange for grading and other improvements.

After 1910, as automobile usage surged, and as suburbanization occurred on the edges of towns and cities in California and elsewhere, city planners began articulating a *hierarchy of streets* to distinguish residential roads, collector roads, arterial roads, and highways, each handling progressively higher volumes of traffic. Through the remainder of the twentieth century, as commercial and residential growth supplanted farms and ranches on the edges of California towns and cities, many rural county roads became adapted to suit the new suburban landscape. In many places, older two-lane rural roads became two- and four-lane suburban arterial streets lined with shopping centers and parking lots; others became two-lane collector streets lined with new residential subdivisions.

KNOWN CULTURAL RESOURCES

A summary of the records search, field survey, and Native American consultation that was performed for the Project site is included below.

Records Search

A records search was conducted on August 8, 2022, for the Project site and a 0.5-mile radius through the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS). The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile radius of the Project site and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area. In addition, a variety of other sources were consulted, including the Built Environment Resource Directory, California Historical Landmarks, California Points of Historical Interest, Directory of Properties in the Historical Resources Inventory, Caltrans Local and State Bridge Survey, Historic Spots in California, local historical registries for historical sites and landmarks in Fresno County, RealQuest Property Search, General Land Office land patent records, and historic aerials and surveys.

Results of the SSJVIC records search indicate that 19 previous cultural resource investigations have been conducted within 0.5 mile of the APE, covering approximately 90 percent of the total area surrounding the property within the records search radius. Of the 19 studies, seven covered a portion of the APE. These studies revealed the presence of a precontact site that consists of a bedrock milling site; and historical sites, including water conveyance, historic refuse, and a historic building associated with rural/agricultural activities. The previous studies were conducted between 1975 and 2018.

The records search also determined that one previously recorded pre-contact resource and three historic-era cultural resources are located within 0.5 mile of the APE. Of these, one is believed to be associated with Native American occupation of the vicinity, and three are historic-era sites associated with irrigation and agricultural activities.

TABLE 3.5-1: CULTURAL RESOURCES RECORDED WITHIN THE STUDY AREA

SITE NUMBER CA-FRE-	*PRIMARY NUMBER P-10-*	*YEAR AND RECORDER*	*AGE/ PERIOD*	*SITE DESCRIPTION*	*WITHIN APE?*
1691	1691	1984 (Roc H. Indermill, Lorri Planas, UCLA Archaeological Survey, Dillon party)	Pre-contact	The Grialdi-Keller Site – Bedrock milling and cupules. NRHP-eligible, listed in CRHR	Adjacent
3564H	5934	2007 (R. Baloian, Applied EarthWorks, Inc.); 2013 (Randy Baloian, Applied EarthWorks, Inc.); 2017 (Ward Stanley and Randy Baloian, Applied EarthWorks, Inc.)	Historic	Shepherd Avenue segment of Enterprise Canal	No
–	6461	2015 (Matthew Armstrong, PG&E)	Historic	Privy/trash deposit	No
–	7197	2017 (Michael Lawson, Peak & Associates, Inc.)	Historic	Single family property – 5230 E. Shepherd Avenue, evaluated as 3CS – appears eligible for CR	No

SOURCE: ECORP CONSULTING, INC., CULTURAL RESOURCES INVENTORY REPORT, TRIANGLE PROPERTY PROJECT, FRESNO COUNTY, CALIFORNIA, JANUARY 2023.

SACRED LANDS FILE

In addition to the SSJVIC records search, ECORP contacted the NAHC, on July 29, 2022, to request a search of the Sacred Lands File. The Sacred Lands File is populated by members of the Native American community with knowledge about the locations of tribal resources. A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources in the area of the Project site.

Field Survey

ECORP conducted an intensive pedestrian survey of the APE, from August 15 through August 19, 2022, under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* using 15-meter transects. Much of the APE was covered with short, dense grasses, and some portions showed evidence of tilling. Ground surface visibility ranged from less than 10 percent in areas of dense vegetation to 90 percent in previously disturbed areas. Approximately 2.96 acres located along North Temperance Avenue were not surveyed due to the presence of a palm orchard that impeded safety. The palm orchard was planted in the mid-2000s, and subsequent maintenance would have uprooted and removed or destroyed any surface expression of archaeological deposits.

ECORP identified 10 architectural resources and one pre-contact resource within the APE during the 2022 field survey. A summary description and evaluation of these identified resources is provided below; refer to Appendix E for a full description and evaluation of each resource.

TRI-001-S is the Big Dry Creek Project in Fresno County. The resource consists of a reservoir on Big Dry Creek with a storage capacity of 30,200 acre-feet. The Big Dry Creek Project reduced the risk of destructive flood events, such as the 1938 flood on Big Dry Creek, and allowed for patterns of agricultural and urban development in flood-prone areas of Clovis and Fresno, making it associated with events that have made a significant contribution to the broad patterns of our history. However, as indicated in the Cultural Resources Report, the project's original design was modified in 1993, compromising the overall integrity of the resource. It is therefore not eligible for the NRHP or CRHR.

TRI-003-S is a segment of East Perrin Avenue (historically called Friant Road) in Fresno County. It is a 20-foot-wide, 3,250-foot-long, two-lane rural section line road paved with asphalt. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-005-S is a segment of East Behymer Avenue in Fresno County. It is a 20-foot-wide, 4,830-foot-long, two-lane rural section line road paved with asphalt. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-006-S is a segment of East Shepherd Avenue in Fresno County. It is a 43-foot-wide, two-mile-long, three- and four-lane suburban arterial and section line road paved with asphalt. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-007-S is a segment of North Fowler Avenue in Fresno County. It is a 20-foot-wide, one-mile-long, two-lane, rural collector and section line road paved with asphalt. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-009-S is a farm/ranch property located at 6110 and 6120 East Shepherd Avenue. It consists of a main house, barn, secondary house, and shed. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-011-S is a farm/ranch property located at 6374 East Shepherd Avenue. It consists of a main house, garage, secondary house, and farm/ranch buildings. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-016-S is an Aermotor 702 windmill mounted on a steel tower with an associated groundwater pump. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, and is not listed on any Certified Local Government historic property register. However, though not rare, Aermotor 702 windmills do possess intrinsic historical value that may suit a local history museum's collections management policy or may be incorporated into a community design.

TRI-017-S is a segment of North Temperance Avenue in Fresno County. It is a 20-foot-wide, 1,230-foot-long, two-lane rural section line road. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-019-S is a farm/ranch property located at 9255 North Temperance Road. It consists of a main building and shed. The Cultural Resources Report concludes that this resource does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district, nor is it listed on any Certified Local Government historic property register.

TRI-015-I is an isolated pre-contact basalt tertiary flake measuring less than three centimeters. An ECORP archaeologist observed the isolated flake on the ground and conducted a thorough investigation of the surrounding area within five meters in each direction with 100 percent coverage but did not observe additional artifacts. There were no rodent burrows or surface disturbances in the immediate area that might otherwise suggest that the flake was moved to the surface through bioturbation. Isolates such as TRI-015-I typically do not individually contribute to the broad patterns of history because they cannot be connected to a particular event; are similarly difficult to associate with specific individuals due to their lack of association with archaeological or historical sites; they do not embody the distinctive characteristics of a type, period, region, or method of construction, represent the work of an important creative individual or possess high artistic values; and they do not provide important information in history or prehistory. Therefore, as indicated in the Cultural Resources Report, isolated artifacts are not considered to be a Historic Property for the purpose of Section 106 NHPA or a Historical Resource under CEQA.

LIKELIHOOD FOR SUBSURFACE CULTURAL RESOURCES

The Cultural Resources Report concludes that due to the presence of alluvium along Big Dry Creek and given the likelihood of precontact archaeological sites located along perennial waterways, there exists a moderate potential for buried precontact archaeological sites in the APE along Big Dry Creek. Within the area of moderate potential exists the Delhi sandy loam, a material that is

often associated with archaeological deposits. However, this soil type comprises less than one percent of the total APE. The overall potential for buried archaeological sites reduces with distance from the perennial waterway.

NATIVE AMERICAN CONSULTATION

The Project includes an amendment to the General Plan, triggering the need for tribal consultation pursuant to Senate Bill (SB) 18. Pursuant to SB 18 and Assembly Bill (AB) 52, the City sent consultation letters to listed Native American Tribal Organizations via mail on December 8, 2023, requesting information related to cultural resources or heritage sites within the Project site; refer to Appendix E for tribal consolation communications.

The City received a response from the Table Mountain Rancheria dated December 27, 2023 expressing interest in the Project because it is within their cultural area of interest. Table Mountain Rancheria requested any record search completed for the Project and requested to be contacted for further discussion. The City contacted Table Mountain Rancheria via the email provided on January 9, 2024 and January 26, 2024 to discuss availability for a meeting; however, the City did not receive a response. The City sent an email on February 5, 2024, which included the Cultural Resources Report, and requested to be contacted for a consultation meeting. Pursuant to §21080.3.2(b)(2) of the Public Resources Code (PRC), consultation may conclude when a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. While the City was not able to discuss a mutual agreement, the City has made a reasonable effort to meet and discuss the letter submitted by the Table Mountain Rancheria.

Consultation closed on March 7, 2024. No additional requests for formal consultation were made during the consultation period.

3.5.2 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, State, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

Section 106 Process

Through regulations associated with the NHPA, an impact to a cultural resource would be considered significant if government action would affect a resource listed in or eligible for listing

in the NRHP. The NHPA codifies a list of cultural resources found to be significant within the context of national history, as determined by a technical process of evaluation. Resources that have not yet been placed on the NRHP, and are yet to be evaluated, are afforded protection under the NHPA until shown to not be significant.

Section 106 of the NHPA and its implementing regulations (36 Code of Federal Regulations [CFR] Part 800) note that for a cultural resource to be determined eligible for listing in the NRHP, the resource must meet specific criteria associated with historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP are applied within an analysis when there is some question as to the significance of a cultural resource. The criteria for evaluation are defined as the quality of significance in American history, architecture, archaeology, engineering, and culture. This quality must be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- *Criterion A:* It is associated with events that have made a significant contribution to the broad patterns of our history; or
- *Criterion B:* It is associated with the lives of persons significant in our past; or
- *Criterion C:* It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- *Criterion D:* It has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D is usually reserved for archaeological resources. Eligible cultural resources must meet at least one of the above criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

The Section 106 evaluation process does not apply to projects undertaken under City environmental compliance jurisdiction. However, should the undertaking require funding, permits, or other administrative actions issued or overseen by a Federal agency, analysis of potential impacts to cultural resources following the Section 106 process would likely be necessary. The Section 106 process typically excludes cultural resources created less than 50 years ago unless the resource is considered highly significant from the local perspective. Finally, the Section 106 process allows local concerns to be voiced and the Section 106 process must consider aspects of local significance before a significance judgment is rendered.

American Indian Religious Freedom Act and Native American Graves and Repatriation Act

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access),

and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

Other Federal Legislation

Historic preservation legislation was initiated by the Antiquities Act of 1966, which aimed to protect important historic and archaeological sites. It established a system of permits for conducting archaeological studies on federal land, as well as setting penalties for noncompliance. This permit process controls the disturbance of archaeological sites on federal land. New permits are currently issued under the Archaeological Resources Protection Act (ARPA) of 1979. The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 declared that it is national policy to "Preserve for public use historic sites, buildings, and objects of national significance."

STATE

California Register of Historic Resources

The California Register of Historical Resources (CRHR) was established in 1992 and codified in the PRC §5020, 5024 and 21085. The law creates several categories of properties that may be eligible for the CRHR. Certain properties are included in the program automatically, including: properties listed in the NRHP; properties eligible for listing in the NRHP; and certain classes of State Historical Landmarks. Determining the CRHR eligibility of historic and prehistoric properties is guided by CCR §§15064.5(b) and PRC §§21083.2 and 21084.1.

Cultural resources, under CRHR guidelines, are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. A cultural resource may be eligible for listing on the CRHR if it:

- is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values; or
- has yielded, or may be likely to yield, information important in prehistory or history.

California Environmental Quality Act

CEQA Guidelines §15064.5 provides guidance for determining the significance of impacts to archaeological and historical resources. Demolition or material alteration of a historical resource, including archaeological sites, is generally considered a significant impact. Determining the CRHR eligibility of historic and prehistoric properties is guided by CCR §§15064.5(b) and PRC §§21083.2 and 21084.1.

CEQA also provides for the protection of Native American human remains (CCR §15064.5[d]). Native American human remains are also protected under the Native American Graves Protection

and Repatriation Act of 1990 (25 USC 3001 et seq.), which requires federal agencies and certain recipients of federal funds to document Native American human remains and cultural items within their collections, notify Native American groups of their holdings, and provide an opportunity for repatriation of these materials. This act also requires plans for dealing with potential future collections of Native American human remains and associated funerary objects, sacred objects, and objects of cultural patrimony that might be uncovered as a result of development projects overseen or funded by the federal government.

If a prehistoric or historic period cultural resource does not meet any of the four CRHR criteria, but does meet the definition of a "unique" site as outlined in PRC §21083.2, it may still be treated as a significant resource if it is: an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
- it has a special and particular quality such as being the oldest of its type or the best available example of its type, or
- it is directly associated with a scientifically recognized important prehistoric or historic event.

California Health and Safety Code

The discovery of human remains is regulated in accordance with California Health and Safety Code Section 7050.5, which states:

> *In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation…until the coroner…has determined…that the remains are not subject to…provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible…. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and…has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.*

Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Penal Code

Section 622.5 of the Penal Code provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands, but specifically excludes the landowner.

California Public Resources Code

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the NAHC; require descendants to be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

Senate Bill 18 (Burton, Chapter 905, Statutes 2004)

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. This legislation, which amended §§65040.2, §§65092, §§65351, §§65352, and §§65560, and added §§65352.3, §§653524, and §§65562.5 to the Government Code; also requires the Governor's Office of Planning and Research to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §§65300 et seq.) and specific plans (defined in Government Code §§65450 et seq.).

Assembly Bill 978

In 2001, Assembly Bill (AB) 978 expanded the reach of Native American Graves Protection and Repatriation Act of 1990 and established a state commission with statutory powers to assure that federal and state laws regarding the repatriation of Native American human remains and items of patrimony are fully complied with. In addition, AB 978 also included non-federally recognized tribes for repatriation.

Assembly Bill 52

AB 52, approved in September 2014, creates a formal role for California Native American tribes by creating a formal consultation process and establishing that a substantial adverse change to a tribal cultural resource has a significant effect on the environment. Tribal cultural resources are defined as:

1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    A) Included or determined to be eligible for inclusion in the CRHR;
    B) Included in a local register of historical resources as defined in PRC §§5020.1(k).
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC §§5024.1 (c). In applying the criteria set forth in PRC §§5024.1 (c) the lead agency shall consider the significance of the resource to a California Native American tribe.

A cultural landscape that meets the criteria above is also a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. In addition, a historical resource described in PRC §§21084.1, a unique archaeological resource as defined in PRC §§21083.2(g), or a "non-unique archaeological resource" as defined in PRC §§21083.2(h) may also be a tribal cultural resource if it conforms with above criteria.

AB 52 requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

LOCAL

City of Clovis General Plan

The 2014 City of Clovis General Plan includes several policies that are relevant to cultural resources. The General Plan policies applicable to the Project are identified below[1]:

Policies: Open Space and Conservation Element

- OS-Policy 2.9. National and state historic resources. Preserve historical sites and buildings of state or national significance in accordance with the Secretary of Interior Standards for Historic Rehabilitation.
- OS-Policy 2.10. Local historic resources. Encourage property owners to maintain the historic integrity of the site by (listed in order of preference): preservation, adaptive reuse, or memorialization.
- OS-Policy 2.12. Public education. Support public education efforts for residents and visitors about the unique historic, natural, and cultural resources in Clovis.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project is considered to have a significant impact on cultural or tribal cultural resources if it will:

- Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5;

[1] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February 2024.

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;
- Disturb any human remains, including those interred outside of formal cemeteries;
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 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:
  - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC § 5020.1(k);
  - 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: Project implementation has the potential to cause a substantial adverse change to a significant historical or archaeological resource, as defined in CEQA Guidelines §15064.5. (Less than Significant with Mitigation)

The proposed Project consists of the expansion of the SOI to add approximately 952 acres into the City's SOI, including the approximately 507-acre Vista Ranch Master Plan (Master Plan) and the 445-acre Non-Development Area. The Master Plan would include a mix of residential, commercial/mixed-uses, an elementary school, and parks, trails and open space. The Non-Development Area includes approximately 445 acres that have not requested, nor would receive, any entitlements other than to be included in the SOI expansion, and as such, no new development or improvements are proposed as part of this Project for the Non-development Area. Therefore, Project implementation would not result in significant impacts to historical or archeological resources within the Non-development Area.

The Development Area consists of a combination of fallow and grazing land, several rural residences, offices and a yard for Landscape Connection and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described above, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses.

As described above, the pedestrian survey conducted as part of the Cultural Resources Report observed 11 previously unrecorded resources within the Development Area, including 10 historic-period architectural resources and one pre-contact isolated archaeological resource; however, the Cultural Resources Report concluded that none of these resources met the NRHP and CRHR eligibility criteria with sufficient integrity to be considered eligible for the NRHP or CRHR. In

addition, results of the records search conducted as part of the Cultural Resources Report indicate that no previously recorded resources are within the Development Area. As such, the Development Area is not located in an area known to have historical and archaeological resources. However, the Cultural Resources Report concludes that there is a moderate potential for buried pre-contact archaeological sites within the Development Area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown historical and archaeological resources. If previously unknown historical and archaeological resources are discovered during Project construction activities, Mitigation Measure 3.5-1 would require construction activities to halt within a 100-foot radius of the find and for a professional archaeologist to analyze the find and properly address potential impacts in accordance with State law. The intent of this requirement is to ensure that any resource found is properly evaluated and protected from significant adverse impacts. Implementation of Mitigation Measure 3.5-1 would ensure that this potential impact is **less than significant**.

MITIGATION MEASURE(S)

Mitigation Measure 3.5-1: *If subsurface deposits believed to be cultural, historical, archaeological, tribal, and/or human in origin are discovered during construction and/or ground disturbance, all work must halt within a 100-foot radius of the discovery. A Native American Representative from traditionally and culturally affiliated Native American Tribes that requested consultation shall be immediately contacted and invited to assess the significance of the find and make recommendations for further evaluation and treatment, as necessary. If deemed necessary by the City, a qualified cultural resources specialist meeting the Secretary of Interior's Professional Qualifications Standards for Archaeology, may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work at the discovery location cannot resume until it is determined by the City, in consultation with culturally affiliated tribes, that the find is not a tribal cultural resource, or that the find is a tribal cultural resource and all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied. The qualified cultural resources specialist shall have the authority to modify the no-work radius as appropriate, using professional judgement.*

The following notifications and measures shall apply to potential unique archaeological resources and potential historical resources of an archaeological nature (as opposed to tribal cultural resources), depending on the nature of the find:

- *If the professional archaeologist determines that the find does not represent a cultural resource that might qualify as a unique archaeological resource or historical resource of an archaeological nature, work may resume immediately and no agency notifications are required.*

- *If the professional archaeologist determines that the find does represent a cultural resource that might qualify as a unique archaeological resource or historical resource of an archaeological nature from any time period or cultural affiliation, he or she shall immediately notify the City and applicable landowner. The professional archaeologist and*

a representative from the City shall consult to determine whether any unique archaeological resources or historical resources of an archaeological nature are present, in part based on a finding of eligibility for inclusion in the NRHP or CRHR. If it is determined that unique archaeological resources or historical resources of an archaeological nature are present, the qualified archaeologist shall develop mitigation or treatment measures for consideration and approval by the City. Mitigation shall be developed and implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), preservation in place may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If approved by the City, such measures shall be implemented and completed prior to commencing further work for which grading or building permits were issued, unless otherwise directed by the City. Avoidance or preservation of unique archaeological resources or historical resources of an archaeological nature shall not be required where such avoidance or preservation in place would preclude the construction of important structures or infrastructure or require exorbitant expenditures, as determined by the City. Where avoidance or preservation are not appropriate for these reasons, the professional archaeologist, in consultation with the City, shall prepare a detailed recommended a treatment plan for consideration and approval by the City, which may include data recovery. If employed, data recovery strategies for unique archaeological resources that do not also qualify as historical resources of an archaeological nature shall follow the applicable requirements and limitations set forth in Public Resources Code Section 21083.2. Data recovery will normally consist of (but would not be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim of recovering important scientific data contained within the unique archaeological resource or historical resource of an archaeological nature. The data recovery plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and State repositories, libraries, and interested professionals. If data recovery is determined by the City to not be appropriate, then an equally effective treatment shall be proposed and implemented. Work may not resume within the no-work radius until the City, in consultation with the professional archaeologist, determines that the site either: 1) does not contain unique archaeological resources or historical resources of an archaeological nature; or 2) that the preservation and/or treatment measures have been completed to the satisfaction of the City.

- *If the find includes human remains, or remains that are potentially human, the contractor shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the County Coroner (per §7050.5 of the Health and Safety Code). The provisions of §7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, then the Coroner will notify the Native American Heritage*

Commission, which then will designate a Native American Most Likely Descendant (MLD) for the project (§5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, then the NAHC can mediate (§5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the treatment measures have been completed to their satisfaction.

Impact 3.5-2: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation)

Indications suggest that humans have occupied Fresno County for over 10,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials.

Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Additionally, PRC § 5097 has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during Project implementation.

While no human remains were found during field surveys of the Project site, implementation of the Mitigation Measure 3.5-1 would ensure that all construction activities which inadvertently discover human remains implement state-required consultation methods to determine the disposition and historical significance of any discovered human remains. Mitigation Measure 3.5-1 provides the appropriate procedures if subsurface deposits believed to be human in origin are discovered during construction and/or ground disturbance. This would include all work being halted within a 100-foot radius of the discovery in order for the appropriately qualified professionals to evaluate the find and provide recommendations on how to proceed. If the appropriately qualified professional determines that the find is not human remains, work may resume immediately and no agency notifications are required. However, if the appropriately qualified professional determines that the find is human remains, procedures are outlined in Mitigation Measure 3.5-1 on how to proceed to ensure that the County Coroner is contacted for an evaluation, and appropriate mitigation or treatment measures are developed based on the findings of the coroner. The intent of this requirement is to ensure that any human remains found is properly evaluated and protected from significant adverse impacts. Implementation of Mitigation Measure 3.5-1 as previously stated, would ensure that the potential to disturb human

remains, including those interred outside of formal cemeteries, would be reduced to a **less than significant** level.

Impact 3.5-3: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074, and that is: listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or a resource determined by the lead agency to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c). (Less than Significant with Mitigation)

As described above, the City sent consultation letters to listed Native American Tribal Organizations via mail on December 8, 2023 in compliance with SB 18 and Assembly Bill (AB) 52, requesting information related to cultural resources or heritage sites within the Project site; refer to Appendix E for tribal consolation communications. The City received a response from the Table Mountain Rancheria dated December 27, 2023. The City contacted Table Mountain Rancheria on January 9, 2024, January 26, 2024, and February 5, 2024; however, a response was not received. Pursuant to §21080.3.2(b)(2) of the PRC, consultation may conclude when a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. While the City was not able to discuss a mutual agreement, the City has made a reasonable effort to meet and discuss the letter submitted by the Table Mountain Rancheria. Consultation closed on March 7, 2024 with no additional requests for formal consultation.

While no specific resources have been identified through consultation with affiliated tribes, it is possible that unknown tribal cultural resources may be present within the Development Area. The proposed Project would be required to follow development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of tribal resources. Mitigation Measure 3.5-1 has been incorporated to provide the appropriate procedures if subsurface deposits believed to be tribal resources, and/or human in origin are discovered during construction and/or ground disturbance. This would include all work being halted within a 100-foot radius of the discovery in order for the appropriately qualified professionals to evaluate the find and provide recommendations on how to proceed. If the appropriately qualified professional determines that the find does not represent a resource that might qualify as a tribal resource, work may resume immediately and no agency notifications are required. However, if the appropriately qualified professional determines that the find does represent a resource that might qualify as a tribal resource, procedures are outlined in Mitigation Measure 3.5-1 on how to proceed to ensure that the resource is evaluated, and appropriate mitigation or treatment measures are developed.

As discussed under Impacts 3.5-1 through 3.5-2, development of the proposed Project could impact unknown archaeological resources, including Native American Tribal artifacts and human remains. If previously unknown Native American Tribal artifacts and/or human remains are discovered during Project construction activities, Mitigation Measure 3.5-1 would require construction activities to halt within a 100-foot radius of the find. A Native American

Representative from traditionally and culturally affiliated Native American Tribes that requested consultation would be contacted and invited to assess the significance of the find and make recommendations for further evaluation and treatment, as necessary. The intent of this requirement is to ensure that any resource found is properly evaluated and protected from significant adverse impacts. Implementation of Mitigation Measure 3.5-1 would ensure that the potential impact to tribal resources, including human remains, would be reduced to a **less than significant** level.

The purpose of this section is to disclose and analyze the potential impacts associated with the geology of the Project site and regional vicinity, and to analyze issues such as the potential exposure of people and property to geologic hazards, landform alteration, and erosion. Mineral resources are also discussed.

Information in this section is derived primarily from the *Geotechnical Engineering Investigation Proposed Residential Development, Behymer and Armstrong Avenues, Clovis California*, prepared by Krazan & Associates, Inc. and dated March 10, 2021; the *Geotechnical Feasibility Evaluation, Triangle Development, Shepherd Avenue and Locan Avenue, Clovis California*, prepared by Krazan & Associates, Inc. and dated December 7, 2023 (revised January 4, 2024); and the *Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California,* prepared by Krazan & Associates, Inc. and dated January 31, 2024; refer to Appendix F. This section is also based in part on the following:

- *2014 Clovis General Plan* (Placeworks, 2014);
- *2014 Clovis General Plan Draft Program Environmental Impact Report* (Placeworks, 2014);
- *Natural Resources Conservation Service (NRCS) Web Soil Survey* (NRCS, 2023); and
- *Fresno County Multi-Jurisdictional Hazard Mitigation Plan* (Amec Foster Wheeler, 2018).

One comment was received during the public review period or scoping meeting for the Notice of Preparation (NOP) regarding this topic from the following: County of Fresno Department of Public Health (November 2, 2023). This comment is addressed within this section. Full comments received are included in Appendix A.

3.6.1 ENVIRONMENTAL SETTING

GEOLOGIC SETTING

Regional Setting

The Project site is in the southern portion of the Great Valley geomorphic province, an alluvial plain about 50 miles wide and 400 miles long.[1] The southern portion of the Great Valley is also referred to as the San Joaquin Valley. The San Joaquin Valley, which includes the Clovis area, is a topographic and structural basin that is bounded on the east by the Sierra Nevada and on the west by the Coast Ranges.[2] The Sierra Nevada, a fault block dipping gently southwestward, is made up of igneous and metamorphic rocks of pre-Tertiary age that comprise the basement complex beneath the Valley. The Coast Ranges contain folded and faulted sedimentary rocks of Mesozoic and Cenozoic age, which are like those rocks that underlie the Valley at depth and nonconformably overlie the

[1] California Department of Conservation, California Geological Survey, California Geomorphic Provinces, Note 36. December 2002. Available at: https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf. Accessed February 2024.

[2] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

basement complex; gently dipping to nearly horizontal sedimentary rocks of Tertiary and Quaternary age overlie the older rocks. These younger rocks are mostly of continental origin and were derived from the Sierra Nevada. The San Joaquin River is the principal river in the area and is located north and west of the Project site. Big Dry Creek is a seasonal tributary of the San Joaquin River; the original channel of the creek runs east to west across the central portion of the Project site. Alluvial fans formed by the San Joaquin River and Big Dry Creek are the largest geomorphic features in the Clovis area. The formation of the fans has resulted in rather flat regional topography.

Local Setting

The Project site is located directly north of the City of Clovis limit line, in unincorporated Fresno County. The Project site is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues. The Project site is within portions of Sections 21, 22, and 23 of Township 12 South, Range 21 East, Mount Diablo Base and Meridian. The Project site is characterized as flat to gently sloping southerly and westerly, with elevations varying from approximately 385 to 400 feet above mean sea level (amsl). There is a knoll at the northeast corner of the Project area that varies in elevation from 395 to 440 feet amsl.

The Development Area consists of a combination of fallow and grazing land, several rural residences, offices, Contractor's Corp Yard and a small tree nursery. The Non-Development Area contains existing rural residential uses and agricultural fields.

FAULTS AND SEISMICITY

Faults

Faults are defined as tectonic fractures or breaks in the earth's crust along which displacement (horizontal, vertical, or diagonal movement) has taken place.[3] Movement between these plates may occur rapidly, in the form of an earthquake, or may occur slowly, in the form of creep.[4] During an earthquake, the rock on one side of the fault suddenly slips with respect to the other.

Faults are classified as Historic, Holocene, Late Quaternary, Quaternary, and Pre-Quaternary according to the age of most recent movement.[5] These classifications are described as follows:

- **Historic:** faults on which surface displacement has occurred within the past 200 years;
- **Holocene:** shows evidence of fault displacement within the past 11,000 years, but without historic record;

[3] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), An Explanatory Text to Accompany the Fault Activity Map of California. 2010. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/FAM_phamplet.pdf. Accessed February 2024.

[4] United States Geological Survey, What is a fault and what are the different types? Available at: https://www.usgs.gov/faqs/what-a-fault-and-what-are-different-types. Accessed February 2024.

[5] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), An Explanatory Text to Accompany the Fault Activity Map of California. 2010. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/FAM_phamplet.pdf. Accessed February 2024.

- **Late Quaternary:** shows evidence of fault displacement within the past 700,000 years, but may be younger due to a lack of overlying deposits that enable more accurate age estimates;
- **Quaternary:** shows evidence of displacement sometime during the past 1.6 million years; and
- **Pre-Quaternary:** without recognized displacement during the past 1.6 million years.

Faults are further distinguished as active, potentially active, or inactive.[6]

- **Active:** An active fault is a Historic or Holocene fault that has had surface displacement within the last 11,000 years;
- **Potentially Active:** A potentially active fault is a pre-Holocene Quaternary fault that has evidence of surface displacement between about 1.6 million and 11,000 years ago; and
- **Inactive:** An inactive fault is a pre-Quaternary fault that does not have evidence of surface displacement within the past 1.6 million years. The probability of fault rupture is considered low; however, this classification does not mean that inactive faults cannot, or will not, rupture.

Figure 3.6-1 provides a map of known nearby faults in relation to the Project site. The closest known fault to the Project site is the Clovis Fault, which extends northwest-southeast from just north of the Project site.[7] The Clovis Fault is a pre-Quaternary fault or fault without recognized Quaternary displacement.[8] A number of mapped Historic and Holocene faults are located near the Coast Ranges and Sierra Nevada mountain ranges, including the Nuñez fault, which experienced surface rupture in 1983.[9] The Owens Valley Fault Zone bounds the eastern edge of the Sierra Nevada block, approximately 80 miles east of the Project site, and contains both active and potentially active faults.[10] Portions of the Ortigalita, Calaveras, Hayward, and Rinconada Faults, located more than 60 miles west of the Project site, are considered potentially active. The San Andreas Fault is possibly the best-known fault and is located approximately 60 to 70 miles west of the Project site.

Seismicity

Earthquakes are generally expressed in terms of intensity and magnitude. Several scales may be used to measure the strength or intensity of an earthquake.[11] Magnitude scales, like the moment

[6] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), An Explanatory Text to Accompany the Fault Activity Map of California. 2010. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/FAM_phamplet.pdf. Accessed February 2024.

[7] California Department of Conservation, California Geological Survey, Fault Activity Map of California. Available at: https://maps.conservation.ca.gov/cgs/fam/. Accessed February 2024.

[8] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), An Explanatory Text to Accompany the Fault Activity Map of California. 2010. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/FAM_phamplet.pdf. Accessed February 2024.

[9] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), An Explanatory Text to Accompany the Fault Activity Map of California. 2010. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/FAM_phamplet.pdf. Accessed February 2024.

[10] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

[11] United States Geological Survey, Earthquake Magnitude, Energy Release, and Shaking Intensity. Available at: https://www.usgs.gov/programs/earthquake-hazards/earthquake-magnitude-energy-release-and-

magnitude (Mw), measure the size of the earthquake at its source. An earthquake event has a single magnitude; however, the degree of ground shaking that the earthquake causes varies from place to place based on distance, type of surface material, and other factors. Magnitude is expressed as a number. For example, a magnitude 5.3 is a moderate earthquake, and a 6.3 is a strong earthquake. Because of the logarithmic basis of the magnitude scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude as measured on a seismogram.

In contrast to magnitude, other scales describe earthquake intensity, which can vary depending on distance from earthquake epicenter and local characteristics. The Modified Mercalli Intensity Scale expresses earthquake intensity experienced at a particular location on a scale of increasing levels of intensity that range from imperceptible shaking to catastrophic destruction. It does not have a mathematical basis; instead, it is an arbitrary ranking based on observed effects. Table 3.6-1 represents the potential effects of an earthquake based on the Modified Mercalli Intensities. Groundshaking of VII intensity was felt in Clovis from the 1872 Owens Valley Earthquake, the largest known earthquake event affecting the Clovis area.[12]

TABLE 3.6-1: MODIFIED MERCALLI INTENSITIES AND EFFECTS

INTENSITY	*SHAKING*	*DESCRIPTION/DAMAGE*
I	Not felt	Not felt except by very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Vibrations similar to the passing of a truck.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like a heavy truck striking a building. Standing vehicles are rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened: Some dishes and windows are broken. Unstable objects are overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, and many are frightened. Some heavy furniture is moved; a few instances of fallen plaster occur. Damage is slight.
VII	Very strong	Damage is negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys are broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage is considerable in specially designed structures; well-designed frame structures are thrown out of plumb. Damage is great in substantial buildings, with partial collapse. Buildings are shifted off foundations.

SOURCE: UNITED STATES GEOLOGICAL SURVEY, THE MODIFIED MERCALLI INTENSITY SCALE. AVAILABLE AT: HTTPS://WWW.USGS.GOV/PROGRAMS/EARTHQUAKE-HAZARDS/MODIFIED-MERCALLI-INTENSITY-SCALE. ACCESSED FEBRUARY 2024.

shakingintensity#:~:text=Moment%20Magnitude%20(MW)%20is,magnitude%20range%20where%20they%20overlap. Accessed February 2024.

[12] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

SEISMIC HAZARDS

Alquist-Priolo Special Study Zone

An active earthquake fault, per California's Alquist-Priolo Act, is one that has ruptured within the Holocene Epoch (about the last 11,000 years).[13] The Alquist-Priolo Act requires the State Geologist to delineate Earthquake Fault Zones along known Holocene-active faults in California. These Earthquake Fault Zones are identified in Special Publication 42 (SP42), which is updated as new fault data become available. The SP42 lists all counties and cities within California that are affected by designated Earthquake Fault Zones. The Fault Zones are delineated on maps within SP42 (Earthquake Fault Zone Maps).

As shown in Figure 3.6-1, the Project site is not within an Alquist-Priolo Special Study Zone. The nearest Alquist-Priolo fault zone, the Nuñez Fault Zone, is located approximately 60 miles southwest of the Project site.

Fault Rupture

Surface fault rupture is the result of fault movement that breaks to the surface of the earth either suddenly during earthquakes, or slowly due to a process known as fault creep, and is the result of tectonic movement that originates deep in the Earth.[14] Surface fault rupture poses a hazard to structures and infrastructure because the displacement that occurs can severely damage buildings. Fault rupture almost always follows pre-existing faults, which are zones of weakness.[15] The Alquist-Priolo Fault Zoning Act requires active earthquake fault zones to be mapped and it provides special development considerations within these zones. It is important to note that the Alquist-Priolo Act only addresses the hazard of surface fault rupture for Holocene-active faults; Pre-Holocene faults may also have the potential to rupture but are not addressed by the Alquist-Priolo Act.

As shown in Figure 3.6-1, the Project site does not have surface expression of active faults and fault rupture is not anticipated.

Seismic Ground Shaking

Although most of Fresno County is situated within an area of relatively low seismic activity, the faults and fault systems that lie along the eastern and western boundaries of Fresno County, as well as other regional faults, have the potential to produce high-magnitude earthquakes throughout the

[13] California Department of Conservation, California Geological Survey, Special Publication 42. Revised 2018. Available at: https://www.conservation.ca.gov/cgs/documents/publications/special-publications/SP_042-a11y.pdf. Accessed February 2024.

[14] California Department of Conservation, California Geological Survey, Special Publication 42. Revised 2018. Available at: https://www.conservation.ca.gov/cgs/documents/publications/special-publications/SP_042-a11y.pdf. Accessed February 2024.

[15] California Department of Conservation, California Geological Survey, CGS Note 54. Available at: https://www.conservation.ca.gov/cgs/documents/publications/cgs-notes/CGS-Note-54-SoCal-Regulatory-Earthquake-Hazard-Zones-a11y.pdf. Accessed February 2024.

County.[16] A high-magnitude earthquake on one of these faults could cause moderate intensity ground shaking in Fresno County. The most probable sources of earthquakes that might cause damage to the Clovis area are the Owens Valley Fault Group approximately 68 miles to the northeast, the Foothills Suture Fault Zone approximately 75 miles to the north, the San Andreas fault approximately 80 miles to the southwest, and the White Wolf fault located about 120 miles to the south.[17] A maximum probable earthquake on any of the major faults would produce a peak ground acceleration in the area of about 0.1g, as ground deceleration generally decreases with increasing distance from the earthquake source.[18] This level of ground shaking correlates to a Modified Mercalli intensity of I to V, light to moderate.

Liquefaction

Liquefaction is a process whereby soil is temporarily transformed to a fluid form during intense and prolonged ground shaking.[19] Under certain circumstances, the ground shaking can temporarily transform an otherwise solid material to a fluid state. Liquefaction is a serious hazard because buildings in areas that experience liquefaction may subside and suffer major structural damage. Liquefaction is most often triggered by seismic shaking, but it can also be caused by improper grading, landslides, or other factors. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet.

According to the Fresno County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), no specific countywide assessments to identify liquefaction hazards have been performed; however, areas of the San Joaquin Valley in Fresno County are not considered conducive to liquefaction due to soil types, because they are either too coarse or too high in clay content.[20] The California Geological Survey Zones of Required Investigation map does not identify any seismically-induced liquefaction zones in the City of Clovis or in the Project site.[21] Additionally, the Geotechnical Investigation concludes that the risk of liquefaction within the Project site is low and liquefaction is not considered a hazard.[22, 23]

[16] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[17] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[18] Peak ground acceleration is calculated as the greatest increase in velocity recorded by a particular station during an earthquake, and typically given in units of g (Earth's gravitational acceleration on its surface). Generally, PGA values of less than 0.1 g are not expected to cause much damage.

[19] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[20] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[21] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 2024.

[22] Krazan & Associates, Inc., *Geotechnical Engineering Investigation Proposed Residential Development, Behymer and Armstrong Avenues, Clovis California*. March 10, 2021.

[23] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

Lateral Spreading

Lateral spreading is a type of ground deformation that occurs when surface material extends or spreads on gentle slopes.[24] Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. Since the potential for liquefaction is low, the potential for lateral spreading is also considered to be low; additionally, the City of Clovis and surrounding area is essentially flat and lateral spreading of soils has not been observed.

SOILS

A Custom Soil Survey was completed for the Project site using the Natural Resources Conservation Service (NRCS) Web Soil Survey program. The NRCS Soils Map is provided in Figure 3.2-2 in Section 3.2, Agricultural Resources. Table 3.6-2 identifies the type and range of soils found in the Project site.

TABLE 3.6-2: PROJECT SITE SOILS

SOIL TYPES	*MASTER PLAN AREA (ACRES)*	*PERCENT OF MASTER PLAN AREA (%)*	*SOI EXPANSION AREA (ACRES)*	*% OF SOI EXPANSION AREA*	*GRAND TOTAL (ACRES)*
An - Alamo clay	0.00	0.0%	8.75	2.0%	8.75
AoA - Atwater loamy sand, 0 to 3 percent slopes, MLRA 17	8.63	1.7%	0.00	0.0%	8.63
AoB - Atwater loamy sand, 3 to 9 percent slopes	19.58	3.9%	0.56	0.1%	20.14
ArA - Atwater sandy loam, 0 to 3 percent slopes	107.97	21.3%	77.90	17.5%	185.87
ArB - Atwater sandy loam, 3 to 9 percent slopes	12.09	2.4%	0.00	0.0%	12.09
AtA - Atwater sandy loam, moderately deep, 0 to 3 percent slopes	32.64	6.4%	3.69	0.8%	36.33
BcC - Blasingame loam, 3 to 15 percent slopes	34.87	6.9%	85.88	19.3%	120.76
CzcB - Cometa-San Joaquin sandy loams, 3 to 9 percent slopes	0.67	0.1%	0.06	0.0%	0.73
DhB - Delhi loamy sand, 3 to 9 percent slopes	2.62	0.5%	0.00	0.0%	2.62
Dn - Dello sandy loam	3.70	0.7%	1.84	0.4%	5.54
Fn - Foster loam	34.57	6.8%	0.01	0.0%	34.58
Gf - Grangeville fine sandy loam, 0 to 1 percent slopes, MLRA 17	25.47	5.0%	30.35	6.8%	55.82
Gn - Grangeville fine sandy loam, hard substratum	7.20	1.4%	0.01	0.0%	7.21

[24] United States Geological Survey, Lateral Spread. Available at: https://www.usgs.gov/media/images/lateral-spread. Accessed February 2024.

SOIL TYPES	*MASTER PLAN AREA (ACRES)*	*PERCENT OF MASTER PLAN AREA (%)*	*SOI EXPANSION AREA (ACRES)*	*% OF SOI EXPANSION AREA*	*GRAND TOTAL (ACRES)*
GtA - Greenfield sandy loam, 0 to 3 percent slopes	5.90	1.2%	2.40	0.5%	8.31
Hu - Hildreth clay	3.04	0.6%	4.27	1.0%	7.31
LmA - Los Robles loam, 0 to 3 percent slopes	0.00	0.0%	1.72	0.4%	1.72
MoD - Millerton rocky fine sandy loam, 3 to 30 percent slopes	2.81	0.6%	0.00	0.0%	2.81
Ra - Ramona loam	35.86	7.1%	5.89	1.3%	41.75
Rb - Ramona loam, hard substratum	0.75	0.1%	0.00	0.0%	0.75
Rc - Ramona sandy loam	1.03	0.2%	0.00	0.0%	1.04
Re - Ramona sandy loam, hard substratum	2.90	0.6%	47.57	10.7%	50.47
Rh - Riverwash	18.57	3.7%	8.01	1.8%	26.59
ScA - San Joaquin loam, 0 to 3 percent slopes	14.60	2.9%	0.00	0.0%	14.60
SeA - San Joaquin loam, shallow, 0 to 3 percent slopes	113.02	22.3%	138.14	31.0%	251.16
SgA - San Joaquin sandy loam, 0 to 3 percent slopes, MLRA 17	1.40	0.3%	0.00	0.0%	1.40
TzbA - Tujunga loamy sand, 0 to 3 percent slopes	16.86	3.3%	23.20	5.2%	40.06
VaA - Visalia sandy loam, 0 to 3 percent slopes	0.00	0.0%	1.61	0.4%	1.61
YkB - Yokohl loam, moderately deep, 3 to 9 percent slopes	0.00	0.0%	3.39	0.8%	3.39
Grand Total	**506.74**	**100%**	**445.26**	**100%**	**952.00**

SOURCE: UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, NRCS CUSTOM SOIL SURVEY, JANUARY 2024.

Each soil series is described below, followed by a description of the physical soil properties:[25, 26]

Alamo clay. The Alamo series consists of moderately deep to hardpan, poorly drained soils that formed in alluvium from mixed sources. Alamo soils are in basins and drainageways on floodplains and fan remnants. Slope ranges from 0 to 2 percent. Erosion potential is moderate (K factor 0.24). Linear extensibility is high.

Atwater sandy loam. The Atwater series consists of very deep, well drained soils formed in granitic alluvium. This series is characterized as well draining, with moderately rapid permeability and slow

[25] United States Department of Agriculture, National Resource Conservation Service, Official Soil Series Description. Available at: https://soilseries.sc.egov.usda.gov/osdname.aspx. Accessed February 2024.

[26] United States Department of Agriculture, National Resource Conservation Service, Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed February 2024.

runoff. The soils are formed in dunes of uniformly sorted material containing a minimum of coarse and very coarse particles. They have mixed mineralogy. Erosion potential is moderate (K factor 0.24 to 0.28). Linear extensibility is low.

Blasingame loam. The Blasingame series consists of moderately deep, well drained soils that formed in material weathered from basic igneous rocks. Erosion potential is moderate (K factor 0.37). Linear extensibility is low-to-moderate.

Cometa-San Joaquin sandy loams. The Cometa series consists of moderately deep, moderately well or well drained soils that formed in alluvium from granitic rock sources. The soils occur on the east side of the lower Sacramento and San Joaquin Valleys and intermountain valleys of the central Coast Range. Erosion potential is moderate (K factor 0.28 to 0.32). Linear extensibility is low to high.

Delhi loamy sand. The Delhi series consists of very deep, somewhat excessively drained soils. They formed in wind modified material weathered from granitic rock sources. Delhi soils are on floodplains, alluvial fans, and terraces. Erosion potential is low-to-moderate (K factor 0.15 to 0.24). Linear extensibility is low.

Dello sandy loam. The Dello series consist of very deep, very poorly drained soils that formed in alluvium from granitic rock sources. Dello soils are on nearly level flood plains, slough remnants and small depressions in the San Joaquin valley and the Sacramento-San Joaquin Delta. Erosion potential is low-to-moderate (K factor 0.05 to 0.24). Linear extensibility is low.

Foster loam. The Foster series is a member of a coarse-loamy mixed, noncalcareous, thermic family of Aquic Haploxerolls. The Foster soils occur on flood plains and nearly level recent alluvial fans. They are formed in deep coarse textured alluvium from granitic rocks. They are poorly or very poorly drained with moderate permeability and ponded to very slow runoff. Erosion potential is moderate to moderately-high (K factor 0.24 to 0.49). Linear extensibility is low.

Grangeville fine sandy loam. This series consists of very deep, somewhat poorly drained soils that formed in moderate coarse textured alluvium dominantly from granitic rock sources. Grangeville soils are on alluvial fans and floodplains and have slopes ranging from 0 to 2 percent. This series is characterized by negligible to very low runoff, moderately rapid permeability, and moderate permeability in saline-sodic phases. Erosion potential is low-to-moderate (K factor 0.10 to 0.28). Linear extensibility is low.

Greenfield sandy loam. The Greenfield series consists of deep, well drained soils that formed in moderately coarse and coarse textured alluvium derived from granitic and mixed rock sources. Greenfield soils are on alluvial fans and terraces and have slopes of 0 to 30 percent. Erosion potential is moderate (K factor 0.24). Linear extensibility is low.

Hildreth clay. The Hildreth series consists of deep, somewhat poorly drained soils that formed in valley fill derived from acid igneous rocks. Hildreth soils are in swales and in sluggish, intermittent

drainageways on valley fill. Erosion potential is moderate (K factor 0.20 to 0.24). Linear extensibility is moderate to high.

Los Robles loam. The Los Robles series consists of very deep and deep well drained soils formed in material weathered from basalt and andesitic rocks. The Los Robles soils are on fans and terraces and have slopes of 0 to 15 percent. Erosion potential is moderate (K factor 0.20 to 0.37). Linear extensibility is low.

Millerton rocky fine sandy loam. The Millerton series is a member of a loamy, mixed, thermic family of Lithic Haploxeralf. The Millerton soils occur on smooth rolling to very steep hills and ridges underlain by metamorphic basic igneous rock. They are well to somewhat excessively drained with moderately rapid permeability and medium to rapid runoff. Erosion potential is moderate (K factor 0.37). Linear extensibility is low.

Ramona loam. The Ramona series is a member of the fine-loamy, mixed, thermic family of Typic Haploxeralfs. The series is well-drained, with slow to rapid runoff and moderately slow permeability. They are used mostly for production of grain, grain-hay, pasture, irrigated citrus, olives, truck crops, and deciduous fruits. Uncultivated areas have a cover of annual grasses, forbs, chamise or chaparral. Erosion potential is moderate to moderately-high (K factor 0.24 to 0.49). Linear extensibility is low-to-moderate.

Riverwash. Riverwash consists of very deep alluvial materials in stream channels that are frequently flooded.[27] Little or no vegetation grows on Riverwash because of the flooding. No attempt is made to classify these materials because of the instability of the unit. The unit is subject to erosion and deposition during flooding events. Erosion potential is low-to-moderate (K factor 0.10 to 0.37). Linear extensibility is low.

San Joaquin loam. The San Joaquin series consists of moderately deep to a duripan, well and moderately well drained soils that formed in alluvium derived from mixed but dominantly granitic rock sources. They are on undulating low terraces with slopes of 0 to 9 percent. The series is characterized by well and moderately well drained, with medium to very high runoff and very slow permeability. Erosion potential is moderate (K factor 0.28 to 0.32). Linear extensibility is low-to-high.

Tujunga loamy sand. This series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. Slopes range from 0 to 12 percent. They are somewhat excessively drained, with negligible to low runoff and high saturated hydraulic conductivity. Erosion potential is low-to-moderate (K factor 0.17 to 0.24). Linear extensibility is low.

[27] University of California, Davis, Riverwash. Available at: https://lawr.ucdavis.edu/classes/ssc118/Colusa_County/riverwash.html. Accessed February 2024.

Visalia sandy loam. The Visalia series is coarse-loamy, mixed, alluvium derived from granite. This series is well drained with very low runoff. Erosion potential is low-to-moderate (K factor 0.15 to 0.24). Linear extensibility is low.

Yokohl loam. The Yokohl Series is a member of a fine, montmorillonitic, thermic family of Typic Durixeralfs. The Yokohl soils occur on gently sloping old fans and terraces on alluvium from dominantly basic igneous rock. Yokohl soils are well drained. Runoff is very slow to rapid and permeability is slow to very slow. Erosion potential is moderate to moderately-high (K factor 0.28 to 0.43). Linear extensibility is low-to-high.

OTHER GEOLOGIC HAZARDS

Expansive Soils

Expansive soils can undergo significant volume change with changes in moisture content. In general, expansive soils shrink and harden when dried, and swell and soften when wet. Such changes can cause distress to building foundations and structures, slabs on grade, pavements, and other surface improvements.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state.[28] Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than three percent; moderate if three to six percent; high if six to nine percent; and very high if more than nine percent. If the linear extensibility is more than three, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots; special design commonly is needed.

According to the NRCS Custom Soil Survey, the soils in Project site generally have a low shrink-swell potential, with the highest potential occurring in the SOI Expansion Area (Non-Development Area); refer to Figure 3.2-2 in Section 3.2, Agricultural Resources. The Geotechnical Investigation encountered upper soils consisting of silty sand, sandy silt, clayey sand, silty sand/sandy silt, and clayey sand.[29] The Geotechnical Investigation indicates that the clayey soils appeared to have a low to moderate swell potential.

Erosion

Erosion refers to a process of wearing away of the land surface (e.g., rocks, soil) by running water, waves, or moving ice and wind, or by such processes as mass wasting and corrosion.[30] Two common types of soil erosion include wind erosion and water erosion. Erosion potential in soils is influenced

[28] United States Department of Agriculture, Natural Resources Conservation Service, National Soil Survey Handbook. Available at: https://directives.sc.egov.usda.gov/49659.wba. Accessed February 2024.

[29] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

[30] United States Department of Agriculture, Natural Resources Conservation Service, National Soil Survey Handbook. Available at: https://directives.sc.egov.usda.gov/49659.wba. Accessed February 2024.

by several factors, including rainfall intensity, steepness and length of slope, vegetative cover, and management practices.[31] Loose soils can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible to water erosion. The potential for erosion generally increases because of human activity, such as through the development and the removal of vegetative cover.

The NRCS Custom Soil Survey identified the erosion potential for the soils in the Project site. This report summarizes those soil attributes used by the Revised Universal Soil Loss Equation Version 2 (RUSLE2) for the map units in the selected area. Soil property data for each map unit component includes the hydrologic soil group, erosion factors Kf for the surface horizon, erosion factor T, and the representative percentage of sand, silt, and clay in the surface horizon.

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water.[32] Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Within the Project site, the erosion factor Kf exhibits a wide range, varying from 0.05 to 0.49, which is considered a low- to moderately-high potential for erosion; however, most of the Project site, particularly the Development Area, exhibits an erosion factor Kf of low-to-moderate. Furthermore, because the Project site is essentially flat, the erosion potential is slight.

Collapsible Soils

Collapsible soils are defined as any unsaturated soil that goes through a radical rearrangement of particles and greatly decreases in volume upon wetting, additional loading, or both.[33] These soils are typically found in arid or semiarid regions and have a loose soil structure and a water content far less than saturation. Four conditions are necessary for soil collapse to occur: an open, partially unstable, partially saturated fabric; sufficient total stress to make the soil structure metastable; presence of a bonding agent or sufficient soil suction to stabilize the soil in the metastable condition; and the addition of water, which reduces soil suction, or softens/destroys the bonding agent, thereby causing shear failures at the inter-aggregate or inter-particle contacts.[34] Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors.

[31] University of California, Publication 8194. Available at: https://anrcatalog.ucanr.edu/pdf/8194.pdf. Accessed February 2024.

[32] United States Department of Agriculture, National Resource Conservation Service, Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed February 2024.

[33] United States Bureau of Reclamation (Knodel, Paul C.), Characteristics and Problems of Collapsible Soils. February 1992. Available at: https://www.usbr.gov/tsc/techreferences/rec/R9202.pdf. Accessed February 2024.

[34] California Department of Transportation, Geotechnical Manual, Collapsable Soil. February 2024. Available at: https://dot.ca.gov/-/media/dot-media/programs/engineering/documents/geotechnical-services/202402-gm-collapsiblesoil-a11y.pdf. Accessed February 2024.

Landslides

The California Geological Survey classifies landslides based on the type of material that failed and the type of movement that the failed material exhibited.[35] Material types are broadly categorized as either rock or soil, or a combination of the two for complex movements. Landslide movements are categorized as falls, topples, spreads, slides, or flows. Landslide potential is influenced by physical factors, such as slope, soil, vegetation, and precipitation. Landslides require a slope, and can occur naturally from seismic activity, excessive saturation, and wildfires, or from human-made conditions such as construction disturbance, vegetation removal, or wildfires.

The Project site is essentially flat; therefore, the potential for a landslide in the Project site is low to non-existent. Additionally, the California Geological Survey Zones of Required Investigation map does not identify any seismically-induced landslide zones in the City of Clovis or in the Project site.[36]

Subsidence

Land subsidence is a gradual settling or sudden sinking of the Earth's surface due to removal or displacement of subsurface earth materials.[37] Common causes of land subsidence include: aquifer-system compaction associated with groundwater withdrawals; drainage of organic soils; underground mining; and natural compaction or collapse. Subsidence takes place gradually, usually over a period of several years. According to the California Department of Water Resources' land subsidence data, the closest monitoring station to the Project site (located approximately 11 miles southwest of the Project site) experienced a vertical displacement rate of -0.12 feet per year for the period of record (2006 to 2023).[38]

PALEONTOLOGICAL RESOURCES

Paleontological resources include fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth.[39]

[35] California Department of Conservation, California Geological Survey, Landslides. Available at: https://www.conservation.ca.gov/cgs/landslides. Accessed February 2024.

[36] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 2024.

[37] United States Geological Survey, Land Subsidence. Available at: https://www.usgs.gov/mission-areas/water-resources/science/land-subsidence#overview. Accessed February 2024.

[38] California Department of Water Resources, California's Groundwater Live, Continuous GPS Stations. Available at: https://dwr.maps.arcgis.com/apps/dashboards/213fcb302b5d413499b2495b2c6080e5. Accessed February 2024.

[39] United States Code, Title 16, Chapter 1c, Section 470aaa, Definitions. Available at: https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title16-section470aaa&num=0&edition=prelim. Accessed February 2024.

The following summary of the geological evolution of the Project area and the potential for paleontological resources is based on the Cultural Resources Report conducted as part of this Project; refer to Appendix F.[40]

The geology of the southern portion of the Project site is composed primarily of Quaternary alluvium and marine deposits from the Pliocene through the Holocene. This portion is predominantly covered in alluvial sediments deposited by ancient and recent water flow. The northeastern portion of the Project site is identified as Mesozoic granitic rocks. The northern portion of the Project site near East Behymer Avenue is identified as undivided pre-Cenozoic metasedimentary and metavolcanic rocks of a wide variety, including slate, quartzite, chert, schists, gneiss, and minor marble.

The following summary of the geological evolution of Clovis and the potential for paleontological resources is based on the Clovis General Plan EIR.[41]

The Clovis General Plan Area, which includes the Project site, overlies recent alluvium, Pleistocene river and possibly lake sediments, and pre-Cretaceous meta-sedimentary rocks, and has either low or undetermined paleontological sensitivity.

Recent alluvium is a coarse-grained unconsolidated river wash, typically too young to contain any fossil resources. Thus, it is considered a formation of low paleontological sensitivity. Pre-Cretacious meta-sedimentary rocks have the potential to contain fossils, but they would have been destroyed by present day. Therefore, it is also considered a formation of low sensitivity.

Pleistocene river and lake sediments could potentially contain significant nonrenewable paleontological resources. Three sedimentary formations are exposed in Clovis: Modesto Formation (Upper Unit); Riverbank Formation (Middle Unit); and Turlock Lake Formation (Upper Unit). Modesto Formation (Upper Unit) is primarily composed of Sierran arkosic sand and gravel, preceding fine sand, and silt near the lower San Joaquin River. Carbon dating determines the Modesto Formation to be 9,000 to 27,000 years old. Riverbank Formation (Middle Unit) is composed of yellowish-brown sandy loam. According to uranium dating, this unit is about 45,000 to 260,000 years old. A vertebrate fauna assigned to the Rancholabrean Land Mammal Age has been found in this unit. The Turlock Lake Formation (Upper Unit) contains stratified silt and fine sand, approximately 600,000 years old. Irvingtonian Land Mammal Age vertebrate fossils have been recovered in several locations in this unit. Thus, the Clovis 1993 General Plan EIR concludes that Pleistocene river and lake sediments are considered an area of undetermined paleontological sensitivity and may contain undiscovered resources.

In addition to the fossils found in the units described above, large mammal bones were discovered in the Clovis area's river terraces dated to the Pleistocene epoch. It should be noted that the Cultural

[40] ECORP Consulting, Inc., Cultural Resources Inventory Report, Triangle Property Project, Fresno County, California. January 2023.

[41] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-05-Cultural-Resources.pdf. Accessed February 2024.

Resource Study specific to the Project site did not identify any Paleontological resources in the study area.

MINERAL RESOURCES

Mineral Resources

A mineral resource is a naturally occurring mineral deposit with a feasible way to be economically extracted.[42] Non-fuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate, including sand, gravel, and crushed stone.[43] The Project site is designated as MRZ-3,[44] which is a classification for areas are those containing aggregate deposits, the significance of which cannot be evaluated from available data.

Location of Permitted Aggregate Mines

The California Office of Mine Reclamation periodically publishes a list of qualified permitted aggregate mines regulated under SMARA that is generally referred to as the AB 3098 List.[45] The Public Contract Code precludes mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates, or other mined materials to State or local agencies. There are no mines, including mines on the AB 3098 List, located within or adjacent to the Project site.[46]

3.6.2 REGULATORY SETTING

FEDERAL

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 (42 USC, 7701 et seq.) requires the establishment and maintenance of an earthquake hazards reduction program by the federal government.

[42] California Department of Conservation, Mineral Resources Program: Mapping California's Mineral Resources and Mineral Hazards. Available at: https://www.conservation.ca.gov/cgs/minerals/storymap?utm_source=minerals+page&utm_medium=referral&utm_campaign=minerals+storymap. Accessed February 2024.

[43] California Department of Conservation, California's Minerals. Available at: https://www.conservation.ca.gov/cgs/minerals. Accessed February 2024.

[44] California Department of Conservation, Division of Mines and Geology, Special Report 158, Mineral Lands Classification: Aggregate Materials in the Fresno Production-Consumption Region. 1988. Available at: https://www.conservation.ca.gov/smgb/guidelines/documents/classdesig.pdf. Accessed February 2024.

[45] California State Mining and Geology Board, Executive Officer's Report. February 10, 2011. Available at: https://www.conservation.ca.gov/smgb/agendas/Documents/Staff_Reports/2011/RBM%200210-9%20AB%203098.pdf. Accessed February 2024.

[46] California Department of Conservation, Mines Online. Available at: https://maps.conservation.ca.gov/mol/index.html. Accessed February 2024.

STATE

California Building Standards Code

Title 24 of the California Code of Regulations, known as the California Building Standards Code (CBSC) or simply "Title 24," contains the regulations that govern the construction of buildings in California. The CBSC includes 12 parts: California Building Standards Administrative Code, California Building Code, California Residential Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Historical Building Code, California Fire Code, California Existing Building Code, California Green Building Standards Code (CAL Green Code), and the California Reference Standards Code. Through the CBSC, the State provides a minimum standard for building design and construction. The CBSC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 sets forth the policies and criteria of the State Mining and Geology Board, which governs the exercise of governments' responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults. The policies and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones, as delineated on maps officially issued by the State Geologist. Working definitions include:[47]

- Fault – a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side;
- Fault Zone – a zone of related faults, which commonly are braided and sub parallel, but may be branching and divergent. A fault zone has a significant width (with respect to the scale at which the fault is being considered, portrayed, or investigated), ranging from a few feet to several miles;
- Sufficiently Active Fault – a fault that has evidence of Holocene surface displacement along one or more of its segments or branches (last 11,000 years); and
- Well-Defined Fault – a fault whose trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. The geologist should be able to locate the fault in the field with sufficient precision and confidence to indicate that the required site-specific investigations would meet with some success.

"Sufficiently Active" and "Well Defined" are the two criteria used by the State to determine if a fault should be zoned under the Alquist-Priolo Act.

[47] California Department of Conservation, California Geological Survey, Special Publication 42. Revised 2018. Available at: https://www.conservation.ca.gov/cgs/documents/publications/special-publications/SP_042-a11y.pdf. Accessed February 2024.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically-induced landslides. Under the Seismic Hazards Mapping Act, seismic hazard zones are to be mapped by the State Geologist to assist local governments in land use planning. The program and actions mandated by the Seismic Hazards Mapping Act closely resemble those of the Alquist-Priolo Earthquake Fault Zoning Act (which addresses only surface fault-rupture hazards) and are outlined below:

The State Geologist is required to delineate and map the various seismic hazard zones.[48]

- Cities and counties, or other local permitting authority, must regulate certain development "projects" within the zones. They must withhold the development permits for a site within a zone until the geologic and soil conditions of the site are investigated and appropriate mitigation measures, if any, are incorporated into development plans.
- The State Mining and Geology Board provides additional regulations, policies, and criteria to guide cities and counties in their implementation of the law. The Board also provides guidelines for preparation of the Seismic Hazard Zone Maps and for evaluating and mitigating seismic hazards.
- Sellers (and their agents) of real property within a mapped hazard zone must disclose that the property lies within such a zone at the time of sale.

National Pollution Discharge Elimination System (NPDES) Construction General Permit

The California State Water Resource Control Board (SWRCB) Order WQ 2022-0057-DWQ, known as the "Construction General Permit," was adopted on September 8, 2022, and became effective on September 1, 2023.[49] The Construction General Permit minimize the discharge of stormwater pollutants from construction activity.

California mandates requirements for all construction activities disturbing more than one acre of land to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP documents the selection and implementation of Best Management Practices (BMPs) for a specific construction project to prevent and retain storm water runoff. The SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a

[48] California Department of Conservation, California Seismic Hazard Zones. Available at: https://www.conservation.ca.gov/cgs/shma. Accessed February 2024.

[49] California State Water Resources Control Board, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit), Order WQ 2022-0057-DWQ, NPDES No. CAS00002. September 2022. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/docs/2022-0057-dwq-with-attachments/cgp2022_order.pdf. Accessed February 2024.

waterbody listed on the State's 303(d) list for sediment. A construction site subject to the General Permit must prepare and implement a SWPPP that meets the requirements of the General Permit.

Division of Mines and Geology

The California Division of Mines and Geology (DMG) operates within the Department of Conservation. The DMG is responsible for assisting in the utilization of mineral deposits and the identification of geological hazards.

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (Public Resources Code, Sections 2710-2796), also known as SMARA, provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition.[50] SMARA also encourages the production, conservation, and protection of the state's mineral resources. Pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board designates lands containing mineral deposits of regional or statewide significance, in coordination with the State Geologist.[51] Mineral lands are mapped using the mineral land classification system, which characterizes both the location and known/presumed economic value of underlying mineral resources. The mineral resource classification system uses four main MRZs based on the degree of available geologic information, the likelihood of significant mineral resource occurrence, and the known or inferred quantity of significant mineral resources. The four classifications are described as follows:[52]

- **MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** Areas containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** Areas where available information is inadequate for assignment to any other MRZ classification.

[50] California Department of Conservation, SMARA Statutes and Regulations. Available at: https://www.conservation.ca.gov/dmr/lawsandregulations. Accessed February 2024.

[51] California State Mining and Geology Board, Guidelines for Classification and Designation of Mineral Lands. Available at: https://www.conservation.ca.gov/smgb/guidelines/documents/classdesig.pdf. Accessed February 2024.

[52] California State Mining and Geology Board, Guidelines for Classification and Designation of Mineral Lands. Available at: https://www.conservation.ca.gov/smgb/guidelines/documents/classdesig.pdf. Accessed February 2024.

State Geological Survey

Like the DMG, the California Geological Survey is responsible for assisting in the identification and proper utilization of mineral deposits, as well as the identification of fault locations and other geological hazards.

LOCAL

City of Clovis General Plan

The 2014 City of Clovis General Plan includes several policies that are relevant to geological hazards and soils. The General Plan policies applicable to the Project are identified below:[53]

Environmental Safety Element

- Policy 1.3. Geologic and seismic risk. Prohibit development on unstable terrain, excessively steep slopes, and other areas deemed hazardous due to geologic and seismic hazards unless acceptable mitigation measures are implemented. Require that underground utilities be designed to withstand seismic forces and accommodate ground settlement.

- Policy 1.5. Critical and public facilities. Locate and design critical and public facilities to minimize their exposure and susceptibility to flooding, seismic and geological effects, fire, and explosions. Ensure critical use facilities (e.g., hospital, police, and fire facilities) can remain operational during an emergency.

Open Space and Conservation Element

- Policy 3.1: Stormwater management. Encourage the use of low impact development techniques that retain or mimic natural features for stormwater management.

- Policy 3.2: Stormwater pollution. Minimize the use of non-point source pollutants and stormwater runoff.

City of Clovis Municipal Code

Chapter 8.1 of the Clovis Municipal Code adopts the 2022 California Building Code, with amendments to address administrative provisions and additional requirements related to moved buildings, as the building code of the City.[54]

Chapter 9.110 provides subdivision design and improvement requirements. Per Section 9.110.040, a grading plan is required to be submitted to and approved by the City Engineer prior to issuance of

[53] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February2024.

[54] City of Clovis Municipal Code, Chapter 8.1, Building Code. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis08/Clovis0801.html#8.1. Accessed February 2024.

a subdivision-level building permit.[55] Subdivisions are required to incorporate appropriate erosion and sediment control measures.

Chapter 9.114 provides standards for the preparation and review of soils reports. A preliminary soils report based upon adequate test borings and prepared by a registered civil engineer is required for every subdivision for which a final map is required or when required as a condition of development when soils conditions warrant the investigation and report.[56] A final soils report is required where a preliminary soils report was required, unless the final report is waived by the City Engineer.

Section 9.22.070 requires development to comply with the Alquist-Priolo Earthquake Fault Zoning Act and the Safety Element of the City's General Plan.[57]

Chapter 9.28 contains landscaping standards and requires a landscape design plan, irrigation design plan, and soil analysis, to reduce runoff and control soil erosion as part of the landscape documentation package.[58]

3.6.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on geology and soils and/or mineral resources if it will:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - 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;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction; or
    - Landslides.
- Result in substantial soil erosion or the loss of topsoil;

[55] City of Clovis Municipal Code, Chapter 9.110, Subdivision Design and Improvement Requirements. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis09110.html#9.110. Accessed February 2024.

[56] City of Clovis Municipal Code, Chapter 9.114, Soils Reports. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis09114.html#9.114. Accessed February 2024.

[57] City of Clovis Municipal Code, Chapter 9.22, Performance Standards. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0922.html#9.22. Accessed February 2024.

[58] City of Clovis Municipal Code, Chapter 9.28, Landscaping Standards. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0928.html#9.28. Accessed February 2024.

- 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;
- 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;
- 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;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- 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; and/or
- 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.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: The proposed Project may expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. (Less than Significant)

Development of the proposed Project could result in the exposure of people and structures to conditions that have the potential for adverse effects associated with rupture of a known earthquake fault, strong seismic ground shaking, and seismic-related ground failure, including liquefaction, or landslides. Each are discussed below:

GROUND RUPTURE

As previously discussed, the Project site is not located within a currently designated Alquist-Priolo Special Study Zone. The closest known fault to the Project site is the Clovis Fault, which extends northwest-southeast from just north of the Project site.[59] The Clovis Fault is a pre-Quaternary fault, or fault without recognized Quaternary displacement, and it is not mapped as active.[60]

Since there are no known active faults crossing the Project site, and the site is not located within an Alquist-Priolo Special Study Zone, the risk of ground rupture at the Project site is low; impacts would be less than significant.

[59] California Department of Conservation, California Geological Survey, Fault Activity Map of California. Available at: https://maps.conservation.ca.gov/cgs/fam/. Accessed February 2024.

[60] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), An Explanatory Text to Accompany the Fault Activity Map of California. 2010. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/FAM_phamplet.pdf. Accessed February 2024.

SEISMIC GROUND SHAKING

Although most of Fresno County is situated within an area of relatively low seismic activity, the faults and fault systems that lie along the eastern and western boundaries of Fresno County, as well as other regional faults, have the potential to produce high-magnitude earthquakes throughout the County.[61] A high-magnitude earthquake on one of these faults could cause moderate intensity ground shaking in Fresno County, including the Project site. To reduce potential impacts of seismic ground shaking on the proposed development, the Project would be required to be constructed using standard engineering and seismic safety design techniques of the California Building Code, as required by Chapter 8.1 of the City's Municipal Code. Structure design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

LIQUEFACTION

Substantial hazards from liquefaction are not expected in areas of the San Joaquin Valley in Fresno County because they are either too coarse or too high in clay content.[62] The California Geological Survey Zones of Required Investigation map does not identify any seismically-induced liquefaction zones in the City of Clovis or in the Project site.[63] Additionally, the Geotechnical Investigation concludes that the risk of liquefaction within the Project site is low and liquefaction is not considered a hazard.[64, 65] Therefore, the probability of soil liquefaction taking place at the Project site is considered to be a low hazard due the composition of on-site soils and distance from active fault zones, resulting in a less than significant impact.

LANDSLIDES

The Project site is essentially flat; therefore, the potential for a landslide in the Project site is low to non-existent. Some limited potential for slope instability risk could arise during grading and construction activities, where slopes could be over-steepened. However, this risk would be mitigated through adherence to relevant California Building Code requirements. Additionally, the California Geological Survey Zones of Required Investigation map does not identify any seismically-induced landslide zones in the City of Clovis or in the Project site.[66] As a result, the probability of landslides causing substantial adverse effects on people or structures is less than significant.

[61] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[62] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[63] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 2024.

[64] Krazan & Associates, Inc., *Geotechnical Engineering Investigation Proposed Residential Development, Behymer and Armstrong Avenues, Clovis California*. March 10, 2021.

[65] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

[66] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 2024.

CONCLUSION

The Project site is subject to potential ground shaking caused by seismic activity. Seismic activity could come from a known active fault such as the Clovis fault, or any number of other faults in the region. To minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. The California Building Code, Title 24, Part 2, Chapter 16 addresses structural design[67] and Chapter 18 addresses soils and foundations.[68] Collectively, these requirements, which have been adopted by the City of Clovis (Chapter 8.1 of the Municipal Code), including design standards and requirements that are intended to minimize impacts to structures in seismically active areas of California. Section 1613 of the California Building Code specifically provides structural design standards for earthquake loads and would ensure potential impacts from ground shaking are minimized.

The Project site has a low risk of seismic-related ground failure because of liquefaction. Landslide potential on the Project site is also low to non-existent. In accordance with Chapter 9.114 of the City of Clovis Municipal Code, a soils report must be submitted to the City along with the Project final map, unless the City Engineer determines that, due to existing available information about the qualities of the soil of the subdivision, no preliminary analysis is necessary. The report would include site-specific design recommendations to ensure that conditions do not pose a threat to the health and safety of people or structures, as well as any special precautions required for erosion control. Implementation of the design recommendations would ensure that all on-site fill soils are properly compacted and comply with the applicable safety requirements established by the California Building Code to reduce risks associated with unstable soils and excavations and fills, and that any issues associated with unstable soils are addressed at the design level. If conditions warrant, the City Engineer may also require preparation of a geologic investigation and report. Therefore, through compliance with applicable State and City codes, potential impacts associated with a seismic event, including seismic ground rupture, ground shaking, liquefaction, and landslides, would be ***less than significant***.

Impact 3.6-2: Implementation and construction of the proposed Project would not result in substantial soil erosion or the loss of topsoil. (Less than Significant)

A NRCS Custom Soil Survey identified the erosion potential for most soils in the Project site as low-to-moderate. Furthermore, because the Project site is essentially flat, the erosion potential is slight. However, Project implementation would provide for development that would involve some land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result

[67] California Building Code 2022, Chapter 16. Available at: https://up.codes/viewer-export/california/ca-building-code-2022/chapter/16/structural-design#16. Accessed February 2024.

[68] California Building Code 2022, Chapter 18. Available at: https://up.codes/viewer/california/ca-building-code-2022/chapter/18/soils-and-foundations#18. Accessed February 2024.

in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters.

The Project would be evaluated for conformance with the CBSC, Clovis General Plan, Municipal Code, and other regulations that address construction activities and soil erosion. Each phase of Project construction disturbing one acre or more of soil would be required to obtain coverage under the Construction General Permit prior to issuance of a grading permit. The Construction General Permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Further, the Project would be required to incorporate appropriate erosion and sediment control measures per Section 9.110.040 of the City's Municipal Code and adhere to the City's landscape standards designed to reduce runoff and control soil erosion. With implementation of applicable State and City requirements, potential impacts associated with erosion and loss of topsoil would be ***less than significant.***

Impact 3.6-3: The proposed Project has the potential to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of Project implementation, and potentially result in landslide, lateral spreading, subsidence, liquefaction or collapse. (Less than Significant)

Development of the proposed Project could result in the exposure of people and structures to conditions that have the potential for adverse effects associated with ground instability or failure. The following discussion identifies the potential for landslides, lateral spreading, subsidence, liquefaction, or collapse within the Project site.

LIQUEFACTION

As discussed in Impact 3.6-1, substantial hazards from liquefaction are not expected in areas of the San Joaquin Valley in Fresno County because they are either too coarse or too high in clay content.[69] The California Geological Survey Zones of Required Investigation map does not identify any seismically-induced liquefaction zones in the City of Clovis or in the Project site.[70] Additionally, the Geotechnical Investigation concludes that the risk of liquefaction within the Project site is low and liquefaction is not considered a hazard.[71, 72] Therefore, the probability of soil liquefaction taking place at the Project site is considered to be a low hazard due the composition of on-site soils and distance from active fault zones.

[69] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[70] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 2024.

[71] Krazan & Associates, Inc., *Geotechnical Engineering Investigation Proposed Residential Development, Behymer and Armstrong Avenues, Clovis California*. March 10, 2021.

[72] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

LATERAL SPREADING

Lateral spreading is a type of ground deformation that occurs when surface material extends or spreads on gentle slopes.[73] Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. Since the potential for liquefaction is low, the potential for lateral spreading is also considered to be low; additionally, the City of Clovis and surrounding area is essentially flat and lateral spreading of soils has not been observed.

LANDSLIDES

As discussed in Impact 3.6-1, the Project site is essentially flat; therefore, the potential for a landslide in the Project site is low to non-existent. Additionally, the California Geological Survey Zones of Required Investigation map does not identify any seismically-induced landslide zones in the City of Clovis or in the Project site.[74] Some limited potential for slope instability risk could arise during grading and construction activities, where slopes could be over-steepened. However, this risk would be mitigated through adherence to relevant California Building Code requirements.

COLLAPSIBLE SOILS

Collapsible soils are defined as any unsaturated soil that goes through a radical rearrangement of particles and greatly decreases in volume upon wetting, additional loading, or both.[75] These soils are typically found in arid or semiarid regions and have a loose soil structure and a water content far less than saturation. Collapsible soils have not been identified in the Clovis General Plan or the Fresno County MJHMP as an issue in the Clovis area.

SUBSIDENCE

Land subsidence is a gradual settling or sudden sinking of the Earth's surface due to removal or displacement of subsurface earth materials.[76] Common causes of land subsidence include aquifer-system compaction associated with groundwater withdrawals; drainage of organic soils; underground mining; and natural compaction or collapse. Subsidence takes place gradually, usually over a period of several years. Data indicate that the area surrounding the Project site has experienced a vertical displacement rate of -0.12 feet per year for the period of record (2006 to

[73] United States Geological Survey, Lateral Spread. Available at: https://www.usgs.gov/media/images/lateral-spread. Accessed February 2024.

[74] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 2024.

[75] United States Bureau of Reclamation (Knodel, Paul C.), Characteristics and Problems of Collapsible Soils. February 1992. Available at: https://www.usbr.gov/tsc/techreferences/rec/R9202.pdf. Accessed February 2024.

[76] United States Geological Survey, Land Subsidence. Available at: https://www.usgs.gov/mission-areas/water-resources/science/land-subsidence#overview. Accessed February 2024.

2023).[77] Subsidence has not been identified in the Clovis General Plan or Fresno County MJHMP as an issue in the Clovis area. Additionally, the Geotechnical Investigation indicates that there are no known occurrences of structural or architectural damage due to deep subsidence in the Clovis area.[78]

CONCLUSION

The Project site does not have a significant risk of becoming unstable as a result landslide, subsidence, soil collapse, liquefaction, liquefaction induced settlement, or lateral spreading. In accordance with Chapter 9.114 of the City of Clovis Municipal Code, a soils report must be submitted to the City along with the Project final map, unless the City Engineer determines that, due to existing available information about the qualities of the soil of the subdivision, no preliminary analysis is necessary. The report would include design recommendations to ensure that conditions do not pose a threat to the health and safety of people or structures, as well as any special precautions required for erosion control. Implementation of the design recommendations would ensure that all on-site fill soils are properly compacted and comply with the applicable safety requirements established by the California Building Code to reduce risks associated with unstable soils and excavations and fills, and that any issues associated with unstable soils are addressed at the design level. If conditions warrant, the City Engineer may also require preparation of a geologic investigation and report. Through compliance with applicable laws, standards, and guidelines, (including the CBSC and City's Municipal Code), the proposed Project would have a ***less than significant*** impact relative to this topic.

Impact 3.6-4: The proposed Project has the potential to result in development 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. (Less than Significant)

Expansive soils are those that undergo volume changes as moisture content fluctuates, generally swelling substantially when wet or shrinking when dry. According to the NRCS Custom Soil Survey, the soils in Project site generally have a low shrink-swell potential, with the highest potential occurring in the SOI Expansion Area (Non-Development Area); refer to Figure 3.2-2 in Section 3.2, Agricultural Resources. Additionally, the Geotechnical Investigation encountered upper soils consisting of silty sand, sandy silt, clayey sand, silty sand/sandy silt, and clayey sand.[79] The Geotechnical Investigation indicates that the clayey soils appeared to have a low to moderate swell potential.

[77] California Department of Water Resources, California's Groundwater Live, Continuous GPS Stations. Available at: https://dwr.maps.arcgis.com/apps/dashboards/213fcb302b5d413499b2495b2c6080e5. Accessed February 2024.

[78] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

[79] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

In accordance with Chapter 9.114 of the City of Clovis Municipal Code, a soils report must be submitted to the City along with the Project final map, unless the City Engineer determines that, due to existing available information about the qualities of the soil of the subdivision, no preliminary analysis is necessary. The soils report would ensure that the foundations, structures, roadway sections, sidewalks, and other improvements can accommodate the site-specific soils, including expansive soils, at those locations. Compliance with this requirement would occur in accordance with the standards and requirements outlined in the California Building Code, Title 24, Part 2, Chapter 16, Chapter 17, and Chapter 18, which addresses structural design, tests and inspections, and soils and foundation standards. The final soils report would include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures. Through compliance with applicable laws, standards, and guidelines, (including the CBSC and City's Municipal Code), the proposed Project would have a ***less than significant*** impact relative to this topic.

Impact 3.6-5: The proposed Project does not have the potential to 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. (Less than Significant)

The proposed Project involves the sphere of influence expansion (SOI) of approximately 952 acres into the City of Clovis' SOI, including the annexation of the proposed 507-acre Vista Ranch Master Plan (Master Plan). The Master Plan area includes a 368-acre Development Area to develop a mix of residential, commercial/mixed-uses, an elementary school, parks, trails, and open space, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses. Septic tanks or septic systems are not proposed as part of the Project and would not be installed to serve the Master Plan. The Master Plan area would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines.

There are no new residences proposed in the Non-Development Area, and no new septic systems would be installed. This area would be part of the SOI expansion but would not be part of the annexation. At some future date, if those residents decided to annex into the City, they would be required to connect to the City of Clovis wastewater collection and treatment system and properly destroy the existing septic systems. The Project would not involve the use of septic tanks or alternative wastewater disposal systems and as such, development of the proposed Project would have a ***less than significant*** impact relative to this topic.

Impact 3.6-6: The proposed Project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant with Mitigation)

Although the Project site is not expected to contain subsurface paleontological resources, these resources have been discovered within the Clovis area. The Project would provide for development that would involve some land clearing, mass grading, and other ground-disturbing activities with the potential to result in the accidental destruction or disturbance of paleontological resources. The

Project site has generally undergone extensive previous grading and is not anticipated to directly or indirectly impact previously undiscovered paleontological resources; however, there is the potential for Project excavation activities to encounter paleontological resources, resulting in a potentially significant impact. Implementation of Mitigation Measure 3.6-1 would ensure steps are taken to reduce impacts to paleontological resources, if they are discovered during construction activities, including stopping work in the event potential resources are found, evaluation of the resource by a qualified paleontologist, and appropriate handling of any potential resource. This mitigation measure would reduce this impact to a ***less than significant*** level.

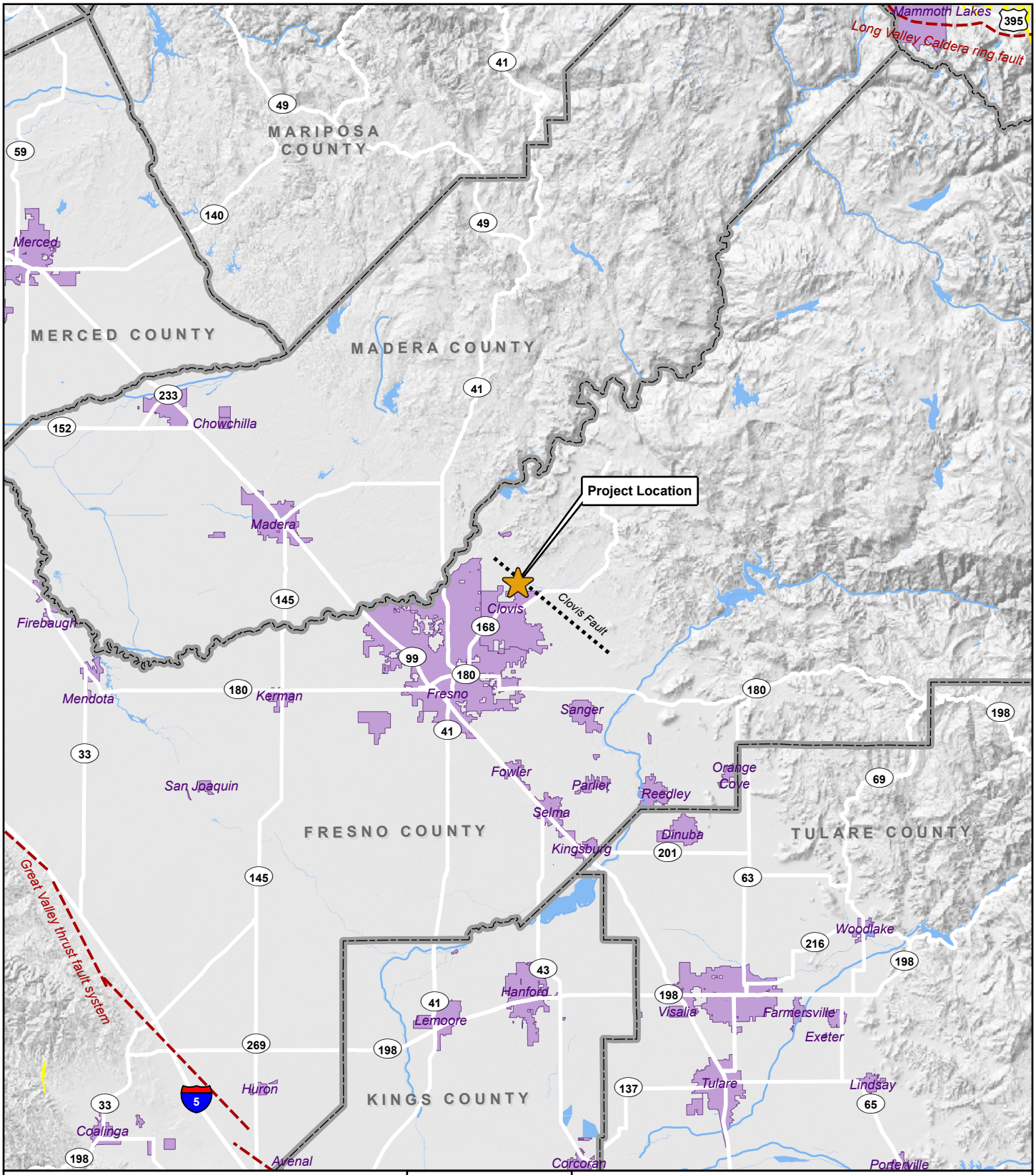
MITIGATION MEASURE(S)

Mitigation Measure 3.6-1: *Prior to approval of a grading permit, the Project proponent shall ensure that grading and improvement plans include the following note: "If any paleontological resources are found during grading and construction activities of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until a qualified paleontologist has evaluated the find. Work shall not continue at the discovery site until the paleontologist evaluates the find and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including preserving in place or relocating on the Project site, if feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology."*

Impact 3.6-7: The proposed Project may 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 and/or 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. (No Impact)

As discussed above, the Project site is designated MRZ-3, which is a classification for areas are those containing aggregate deposits, the significance of which cannot be evaluated from available data. There are no active or inactive mines located within the Project site. Additionally, the City's General Plan EIR concluded that adoption of the General Plan, which contemplated urbanization of the agricultural lands within the General Plan study area, would have no impact on any known mineral resources, active or inactive mines, nor any mineral resource sectors.[80] Therefore, the proposed Project would have ***no impact*** on mineral resources or mineral resource recovery sites.

[80] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-11-Mineral-Resources.pdf. Accessed February 2024.



LEGEND

- Incorporated Area
- County Boundary
- Alquist Priolo Fault Zone
- Quaternary Fault
- Pre-Quaternary Fault

Sources: USGS. California State GeoPortal; Fresno County GIS. February 14, 2023.

N

0 2½ 5

Miles

SOI Expansion Vista Ranch

Figure 3.6-1: Earthquake Faults Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.

This section discusses regional greenhouse gas (GHG) emissions, climate change, and energy conservation impacts that could result from Project implementation. The analysis contained in this section is intended to be at a Project-level, and covers impacts associated with the conversion of the entire Master Plan site to urban uses. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis. The analysis and discussion of the GHG, climate change, and energy conservation impacts in this section focuses on the proposed Project's consistency with local, regional, and statewide climate change planning efforts and discusses the context of these planning efforts as they relate to the proposed Project. Disclosure and discussion of the Project's estimated energy usage and GHG emissions are provided.

There were two comments received during the Notice of Preparation (NOP) comment period regarding air quality. The comments were provided from the San Joaquin Valley Air Pollution Control District (November 13, 2023, and March 5, 2024). All comments are included in Appendix A.

3.7.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2019, concentrations of these three GHGs have increased globally by 47, 156, and 23 percent, respectively (IPCC, 2023).

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors (California Energy Commission, 2023).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 369 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2022 (California Air Resources Board, 2023).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for 38% of total GHG emissions in the State. This category was followed by the industrial sector (23%), the electricity generation sector (including both in-state and out of-state sources) (16%), the agriculture and forestry sector (9%), the residential energy consumption sector (8%), and the commercial energy consumption sector (6%) (California Air Resources Board, 2023).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature because of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. The snowpack portion of the supply could potentially decline by 50% to 75% by the end of the 21st century (National Resources Defense Council, 2014). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels. If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion, and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also

result. According to the Indicators of Climate Change in California report (OEHHA, 2022), the impacts of global warming in California are anticipated to include, but are not limited to, the following:

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the State (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain

uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry, reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for several of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century because of increasing temperatures. The productivity of the State's forests is also expected to decrease because of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are the most widely used form of energy in the State. However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 60 percent of electricity generated by 2030, and to achieve zero-carbon emissions by 2045 (as passed in September 2018, under Senate Bill 100). The 2021 SB 100 Joint Agency Report was published in 2021, which found that the long-term goals contained in SB 100 are technically achievable through multiple pathways, although achieving 100 clean electricity would increase the total annual electricity system cost by 6% relative to the cost under the state's Renewables Portfolio Standard requirement of having at least 60 percent clean electricity by the end of 2030. These estimates will change over time as markets change, new technologies are commercialized, and additional factors such as grid reliability are included in future analyses.

Overall, in 2019, California's per capita energy usage was ranked second-lowest in the nation (U.S. Energy Information Administration, 2020b). California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970s, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e., fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and a very small amount of nuclear generation resources. In 2020, nearly one-half of the electricity supply came from facilities outside of the State. Much of the power delivered to California from states in the Pacific Northwest was generated by wind. States in the Southwest delivered power generated at coal-fired power plants, at natural gas-fired power plants, and from nuclear generating stations (U.S. Energy Information Administration, 2022). In 2020, approximately 41 percent of California's utility-scale net electricity generation was fueled by natural gas. In addition, about 48 percent of the State's utility-scale net electricity generation came from

renewable sources, such as solar, wind, geothermal, hydropower, and biomass. Nuclear energy powered an additional 11 percent. The amount of electricity generated from coal was effectively zero (U.S. Energy Information Administration, 2022). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (U.S. Energy Information Administration, 2023b). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010. In 2022, electricity consumption in Fresno County was 8,384 GWh (California Energy Commission, 2023).

PG&E is a publicly traded utility company that, under contract with the California Public Utilities Commission (CPUC), generates, purchases, and distributes energy. PG&E's service area covers 70,000 square miles, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.

PG&E's electricity is generated from a combination of traditional sources, such as coal-fired plants, nuclear power plants, and hydroelectric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants, or "solar farms." "The grid," or bulk electric grid, is a network of high-voltage transmission lines that link power plants to the PG&E system. The distribution system, comprising lower-voltage secondary lines, is at the street and neighborhood level. It consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to individual customers.

In addition to its base plan, PG&E has three plan options, known as Solar Choice options and Green Saver, which give customers the option of purchasing energy from solar resources. The first Solar Choice option provides up to 50 percent of a customer's energy from solar resources, while the other option provides up to 100 percent of a customer's energy from solar resources, and the Green Saver option provides up to 90 percent of a customer's energy from solar resources.

Table 3.7-1 outlines PG&E's power mix in 2022, compared to the power mix for the state. The table identifies the renewable and non-renewable energy sources for PG&E. It should be noted that some GHG free sources are not considered renewable (e.g., nuclear is GHG free but not renewable).

TABLE 3.7-1. PG&E AND THE STATE OF CALIFORNIA POWER MIX IN 2021

ENERGY RESOURCES	*CALIFORNIA POWER MIX 2022*
Overall Eligible Renewable	**54.23%**
Biomass	2.15%
Geothermal	4.67%
Small hydroelectric	1.12%
Solar	17.04%
Wind	10.83%
Coal	2.15%
Oil	0.02%
Large Hydroelectric	9.24%
Natural Gas	36.38%
Nuclear	9.18%
Other (Waste Petroleum/Petroleum Coke	0.11%
Unspecified[A]	7.11%

SOURCE: PG&E. 2023. 2022 POWER CONTENT LABEL. AVAILABLE: HTTPS://WWW.PGE.COM/CONTENT/DAM/PGE/DOCS/ACCOUNT/BILLING-AND-ASSISTANCE/POWER-CONTENT-LABEL.PDF. ACCESSED: APRIL 26, 2024.

[A]ELECTRICITY FROM TRANSACTIONS THAT ARE NOT TRACEABLE TO SPECIFIC GENERATION SOURCES ARE CLASSIFIED AS UNSPECIFIED SOURCES OF POWER.

In 2022, the latest year for which data is available, statewide consumption was 277,205 GWh (California Energy Commission, 2024). In 2022, electricity consumption in Fresno County was 8,384 GWh (California Energy Commission, 2023).

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2019, world consumption of oil had reached approximately 98 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (U.S. EIA, 2020c). The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 95 percent of the State's transportation energy needs.

Natural Gas/Propane

The State produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2012). PG&E is the largest publicly-traded utility in California and provides natural gas for residential, industrial, and agency consumers within the Fresno County area. PG&E's natural gas (i.e., methane) delivery system includes 42,000 miles of natural gas distribution pipelines and 6,700 miles of transmission pipelines. PG&E's gas transmission system serves approximately 15 million energy

customers in California. The system is operated under an inspection and monitoring program in real time on a 24-hour basis, with leak inspections, surveys, and patrols continuously taking place along the pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transmission pipelines send natural gas from the fields and storage facilities. The smaller distribution pipelines deliver gas to individual businesses or residences.

As of March 2022, California produced 11.4 billion cubic feet of natural gas per month (U.S. EIA, 2022). In 2022, natural gas consumption in Fresno County was approximately 319 million therms (California Energy Commission, 2023). Residential natural gas consumption accounted for approximately 108 million therms.

3.7.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National Ambient Air Quality Standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, State attainment plans, NAAQS motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

In 2007, in the court case of *Massachusetts et al. vs. the USEPA et al*. (549 U.S. 497), the U.S. Supreme Court found that GHGs are air pollutants covered by the Federal Clean Air Act (42 USC Sections 7401-7671q). The Supreme Court held that the Administrator of the United States Environmental Protection Agency must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the Administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing GHG emission standards for vehicles. In collaboration with the National Highway Traffic Safety Administration (NHTSA) and CARB, the USEPA developed emission standards for light-duty vehicles (2012-2025 model years), and heavy-duty vehicles (2014-2027 model years).

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Federal Climate Change Policy

According to the U.S. EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The U.S. EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR," "Climate Leaders," and Methane Voluntary Programs.

The following are actions taken at the federal level relating to GHG emissions.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the U.S. EPA and the Department

of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light duty trucks, and medium duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. The U.S. EPA and the National Highway Safety Administration issued final rules on a second phase joint rulemaking, establishing national standards for light duty vehicles for model years 2017 through 2025 in August 2012.[1] The standards for model years 2017 through 2025 apply to passenger cars, light duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The U.S. EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies adopted engine and vehicle standards that began in the 2014 model year and achieved up to a 20 percent reduction in CO2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies adopted separate gasoline and diesel truck standards, which phased in starting in the 2014 model year.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the U.S. EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the U.S. EPA.

Cap and Trade. Cap and trade refer to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California,

[1] United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: http://www.epa.gov/otaq/climate/documents/420f12051.pdf. Accessed January 21, 2021.

British Columbia, Manitoba, Ontario, and Quebec. Currently, only California and Quebec are participating in the cap-and-trade program.

STATE

The California Legislature has enacted a series of statutes in recent years addressing the need to reduce GHG emissions across the State. These statutes can be categorized into four broad categories: (i) statutes setting numerical statewide targets for GHG reductions, and authorizing CARB to enact regulations to achieve such targets; (ii) statutes setting separate targets for increasing the use of renewable energy for the generation of electricity throughout the State; (iii) statutes addressing the carbon intensity of vehicle fuels, which prompted the adoption of regulations by CARB; and (iv) statutes intended to facilitate land use planning consistent with statewide climate objectives. The discussion below will address each of these key sets of statutes, as well as Executive Orders and CARB "Scoping Plans" intended to achieve GHG reductions under the first set of statutes and recent building code requirements intended to reduce energy consumption.

Statutes Setting Statewide GHG Reduction Targets

ASSEMBLY BILL 32 (GLOBAL WARMING SOLUTIONS ACT)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006 (Health & Safety Code Section 38500 et seq.), also known as Assembly Bill (AB) 32 (Stats. 2006, ch. 488). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed the CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

SENATE BILL 32

SB 32 (Stats. 2016, ch. 249) added Section 38566 to the Health and Safety Code. It provides that "[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030." In other words, SB 32 requires California, by 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

EXECUTIVE ORDERS S-3-05, B-30-15, AND B-55-18

The 2020 statewide GHG reduction target in AB 32 was consistent with the second of three statewide emissions reduction targets set forth in former Governor Arnold Schwarzenegger's 2005 Executive Order known as S-3-05, which is expressly mentioned in AB 32. (See Health & Safety Code Section 38501, subd. (i).) That Executive Branch document included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions

to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a climate action plan. The Secretary of Cal-EPA leads the Climate Action Team, whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the executive order.

In 2015, Governor Brown issued Executive Order, B-30-15, which created and established a "new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050." SB 32 codified this target.

In 2018, the Governor issued Executive Order B-55-18, which established a statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and maintain and achieve negative emissions thereafter." The order directs the CARB to work with other State agencies to identify and recommend measures to achieve those goals. As discussed below, the 2022 Scoping Plan lays out a path towards achieving carbon neutrality by 2045.

SB 350

Senate Bill 350 (SB 350) (Stats. 2015, ch. 547) added to the Public Utilities Code language that puts into statute the 2050 GHG reduction target identified in Executive Order S-3-05, albeit in the limited context of new state policies (i) increasing the overall share of electricity that must be produced through renewable energy sources and (ii) directing certain State agencies to begin planning for the widespread electrification of the California vehicle fleet. Section 740.12(a)(1)(D) of the Public Utilities Code states that "[t]he Legislature finds and declares [that] … [r]educing emissions of [GHGs] to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification." Furthermore, Section 740.12(b) states that the California Public Utilities Commission (CPUC), in consultation with CARB and the California Energy Commission (CEC), must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, … and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

AB 1279

In September 2022, the Legislature enacted AB 1279 (Stats. 2022, ch. 337). The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

Statutes Setting Target for the Use of Renewable Energy for the Generation of Electricity

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All these entities were required to meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].) SB 350, discussed below, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) In 2018, Senate Bill 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve 50% renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60% target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all State agencies by December 31, 2045.

Statutes and CARB Regulations Addressing the Carbon Intensity of Petroleum-based Transportation Fuels

ASSEMBLY BILL 1493, PAVLEY CLEAN CARS STANDARDS

In 2002, the Legislature enacted Assembly Bill 1493 ("Pavley Bill") (Stats. 2002, ch. 200), which directed CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks beginning with model year 2009. (See Health and Safety Code Section 43018.5.) In September 2004, pursuant to this directive, CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are commonly known as the "Pavley standards." In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These regulations created what are commonly known as the "Pavley II standards." (See California Code of Regulations, Title 13, Sections 1900, 1961, and 1961.1 et seq.)

In 2012, CARB adopted an Advanced Clean Cars (ACC) program aimed at reducing both smog-causing pollutants and GHG emissions for vehicles model years 2017-2025. This historic program, developed in coordination with the USEPA and NHTSA, combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The regulations focus on substantially increasing the number of plug-in hybrid cars and zero-emission vehicles in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and

medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. (See California Code of Regulations, Title 13, Sections 1900, 1961, 1961.1, 1961.2, 1961.3, 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, and 2317 et seq.)

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, all while improving fuel efficiency and reducing motorists' costs.

Statute Intended to Facilitate Land Use Planning Consistent with Statewide Climate Objectives

CALIFORNIA SENATE BILL 375 (SUSTAINABLE COMMUNITIES STRATEGY)

This 2008 legislation built on AB 32 by setting forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHGs. The focus is to reduce miles traveled by passenger vehicles and light trucks. CARB is required to set GHG reduction targets for each metropolitan region for 2020 and 2035.[2] Each of California's metropolitan planning organizations then prepares a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. Once adopted by the metropolitan planning organizations, the sustainable communities strategy is to be incorporated into that region's federally enforceable regional transportation plan. If a metropolitan planning organization is unable to meet the targets through the sustainable communities strategy, then an alternative planning strategy must be developed that demonstrates how targets could be achieved, even if meeting the targets is deemed to be infeasible.

Climate Change Scoping Plans

2022 SCOPING PLAN UPDATE

In accordance with AB 32, the CARB developed the first Scoping Plan in 2008 to outline the State's strategy to achieve 1990 level emissions by year 2020. In May 2014, the CARB released and adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012. A newer version of the Scoping Plan was then adopted by the CARB in December 2017 (entitled *California's 2017 Climate Change Scoping Plan*). Lastly, the most recent version of the Scoping Plan was adopted by the CARB in November 2022 (entitled *Final 2022 Scoping Plan for Achieving Carbon Neutrality*) (2022 Scoping Plan), which was designed consistent with the long-term GHG reduction targets embedded in AB 1279. Since adoption of the 2008 Scoping Plan and the subsequent updates in 2014, 2017, and 2022, State agencies have adopted programs identified in the plan, and the Legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations,

[2] The San Joaquin COG region was assigned reduction targets of 12% by 2020 and 16% by 2035.

California Building Standards (e.g., CALGreen and the 2022 Building and Energy Efficiency Standards), zero carbon electricity by 2045, and changes in the corporate average fuel economy standards (e.g., Pavley I and California Advanced Clean Cars).

SB 605 AND SB 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state, and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for methane and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy (Reduction Strategy) in March 2017. The Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases.

ASSEMBLY BILL 1757

AB 1757 (September 2022) requires the California Natural Resources Agency (CNRA) to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. These targets are to be determined by no later than January 1, 2024, and are established to support the state's goals to achieve carbon neutrality and foster climate adaptation and resilience.

Building Code Requirements Intended to Reduce GHG Emissions

CALIFORNIA ENERGY CODE

The California Energy Code (CCR Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

The most recent Title 24 standards are the 2022 Title 24 standards. Buildings permitted on or after January 1, 2023, must comply with the 2022 Standards. The California Energy Commission updates the standards every three years. The CEC estimates that the 2022 Title 24 standards will reduce 10 million metric tons of GHG over 30 years. When compared to the 2019 Title 24 standards, the 2022 update focuses on: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic (PV) system and battery storage standards; and strengthening ventilation standards to improve indoor air quality.

CALIFORNIA GREEN BUILDING STANDARDS CODE

The purpose of the California Green Building Standards Code (CalGreen) (CCR Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. CalGreen, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- Tier I: 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- Tier II: 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

The latest version of CalGreen is the 2022 CalGreen Code, which became effective on January 1, 2023. Between 2010 and 2022, continuous updates and additions have been made to CALGreen, including water conservation and recycling, electric vehicle infrastructure and charging, and changes intended to eliminate conflicts with the California Energy Code, which is Part 6 of Title 24.

TITLE 20

CCR Title 20 requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of

appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

SOLID WASTE

AB 939, AB 341, and AB 1826. In 1989, AB 939, known as the Integrated Waste Management Act (PRC Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal (CalRecycle, 2012).

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses subject to the law decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

REGIONAL

PG&E adopted the 2020 Integrated Resource Plan (IRP) on September 1, 2020, to provide guidance for serving the electricity and natural gas needs of residents and businesses within its service area while fulfilling regulatory requirements. The IRP contains the following objectives that are relevant to the Project:

- Clean Energy: In 2021, PG&E delivered nearly 50 percent of its electricity from RPS-eligible renewable resources, such as solar, wind, geothermal, biomass, and small hydropower. In addition, PG&E's GHG-free energy production, which encompasses renewable resources, large hydropower, and nuclear, satisfied all of PG&E's bundled retail sales in 2021.
- Reliability: PG&E's IRP analysis includes PG&E's contribution to system and local reliability, in compliance with the CPUC's resource adequacy requirements, especially as California transitions toward higher shares of GHG-free generation resources.

- Affordability: PG&E's IRP analysis selects resources to meet the state's clean energy and reliability goals and provides a system average rate forecast in compliance with the CPUC's requirements for investor-owned utilities.

SAN JOAQUIN AIR POLLUTION CONTROL DISTRICT

Climate Change Action Plan

On August 21, 2008, the Valley Air District Governing Board approved a proposal called the Climate Change Action Plan (CCAP). The CCAP began with a public process bringing together stakeholders, land use agencies, environmental groups, and business groups to conduct public workshops to develop comprehensive policies for CEQA Guidelines, a carbon exchange bank, and voluntary GHG emissions mitigation agreements for the Governing Board's consideration. The CCAP contains the following goals and actions:

- Develop GHG significance thresholds to address CEQA projects with GHG emission increases.
- Develop the San Joaquin Valley Carbon Exchange for banking and trading GHG reductions.
- Authorize use of the SJVAPCD [Valley Air District's] existing inventory reporting system to allow use for GHG reporting required by AB 32 regulations.
- Develop and administer GHG reduction agreements to mitigate proposed emission increases from new projects.
- Support climate protection measures that reduce GHG emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted areas.

Rule 2301

While the CCAP indicated that the GHG emission reduction program would be called the San Joaquin Valley Carbon Exchange, the Valley Air District incorporated a method to register voluntary GHG emission reductions into its existing Rule 2301-Emission Reduction Credit Banking through amendments of the rule. Amendments to the rule were adopted on January 19, 2012. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use.
- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use.
- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable.

LOCAL

City of Clovis General Plan

The City of Clovis General Plan includes several policies that are relevant to greenhouse gases. General Plan goals and policies applicable to the Project are identified below:

Policies: Circulation Element

- Goal 1: A context-sensitive and "complete streets" transportation network that prioritizes effective connectivity and accommodates a comprehensive range of mobility needs.
- Policy 1.1: Multimodal network. The city shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.
- Policy 1.2: Transportation decisions. Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists.
- Policy 1.3: Age and mobility. The design of roadways shall consider all potential users, including children, seniors, and persons with disabilities.
- Policy 1.4: Jobs and housing. Encourage infill development that would provide jobs and services closer to housing, and vice versa, to reduce citywide vehicle miles travelled and effectively utilize the existing transportation infrastructure.
- Policy 1.5: Neighborhood connectivity. The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses).
- Policy 1.6: Internal circulation. New development shall utilize a grid or modified-grid street pattern. Areas designated for residential and mixed-use village developments should feature short block lengths of 200 to 600 feet.
- Policy 1.7: Narrow streets. The City may permit curb-to-curb dimensions that are narrower than current standards on local streets to promote pedestrian and bicycle connectivity and enhance safety.
- Policy 1.8: Network completion. New development shall complete the extension of stub streets planned to connect to adjacent streets, where appropriate.
- Goal 4: A bicycle and transit system that serves as a functional alternative to commuting by car.
- Policy 4.1: Bike and transit backbone. The bicycle and transit system should connect Shaw Avenue, Old Town, the Medical Center/R&T Park, and the three Urban Centers.
- Policy 4.2: Priority for new bicycle facilities. Prioritize investments in the backbone system over other bicycle improvements.
- Policy 4.3: Freeway crossings. Require separate bicycle and pedestrian crossings for new freeway extensions and encourage separate crossings where Class I facilities are planned to cross existing freeways.
- Policy 4.4: Bicycles and transit. Coordinate with transit agencies to integrate bicycle access and storage into transit vehicles, bus stops, and activity centers.
- Policy 4.5: Transit stops. Improve and maintain safe, clean, comfortable, well-lit, and rider-

friendly transit stops that are well marked and visible to motorists.

- Policy 4.6: Transit priority corridors. Prioritize investments for, and transit services and facilities along the transit priority corridors.
- Policy 4.7: Bus rapid transit. Plan for bus rapid transit and transit-only lanes on transit priority corridors as future ridership levels increase.
- Goal 5: A complete system of trails and pathways accessible to all residents.
- Policy 5.1: Complete street amenities. Upgrade existing streets and design new streets to include complete street amenities, prioritizing improvements to bicycle and pedestrian connectivity or safety, consistent with the Bicycle Transportation Master Plan and other master plans.
- Policy 5.2: Development-funded facilities. Require development to fund and construct facilities as shown in the Bicycle Transportation Plan when facilities are in or adjacent to the development.
- Policy 5.3: Pathways. Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger.
- Policy 5.4: Homeowner associations. The city may require homeowner associations to maintain pathways and other bicycle and pedestrian facilities within the homeowner association area.
- Policy 5.5: Pedestrian access. Require sidewalks, paths, and crosswalks to provide access to schools, parks, and other activity centers and to provide general pedestrian connectivity throughout the city.
- Goal 6: Safe and efficient goods movement with minimal impacts on local roads and neighborhoods.
- Policy 6.1: Truck routes. Plan and designate truck routes that minimize truck traffic through or near residential areas.
- Policy 6.2: Land use. Place industrial and warehousing businesses near freeways and truck routes to minimize truck traffic through or near residential areas.

Policies: Air Quality Element

- Goal 1: A local environment that is protected from air pollution and emissions.
- Policy 1.1: Land use and transportation. Reduce greenhouse gas and other local pollutant emissions through mixed use and transit-oriented development and well-designed transit, pedestrian, and bicycle systems.
- Policy 1.2: Sensitive Land Uses. Prohibit, without sufficient mitigation, the future siting of sensitive land uses within the distances of emission sources as defined by the California Air Resources Board.
- Policy 1.3: Construction activities. Encourage the use of best management practices during construction activities to reduce emissions of criteria pollutants as outlined by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- Policy 1.4: City buildings. Require that municipal buildings be designed to exceed energy and water conservation and greenhouse gas reduction standards set in the California Building Code.
- Policy 1.5: Fleet operations. Purchase low- or zero-emission vehicles for the city's fleet

where feasible. Use clean fuel sources for city-owned mass transit vehicles, automobiles, trucks, and heavy equipment where feasible.

- Policy 1.6: Alternative fuel infrastructure. Encourage public and private activity and employment centers to incorporate electric charging and alternative fuel stations.
- Policy 1.7: Employment measures. Encourage employers to provide programs, scheduling options, incentives, and information to reduce vehicle miles traveled by employees.
- Policy 1.8: Trees. Maintain or plant trees where appropriate to provide shade, absorb carbon, improve oxygenation, slow stormwater runoff, and reduce the heat island effect.
- Goal 2: A region with healthy air quality and lower greenhouse gas emissions.
- Policy 2.1: Regional coordination. Support regional efforts to reduce air pollution (criteria air pollutants and greenhouse gas emissions) and collaborate with other agencies to improve air quality at the emission source and reduce vehicle miles traveled.
- Policy 2.2: Cross-jurisdictional issues. Collaborate with regional agencies and surrounding jurisdictions to address cross-jurisdictional transportation and air quality issues.
- Policy 2.3: Valleywide programs. Establish parallel air quality programs and implementation measures with other communities across the San Joaquin Valley.
- Policy 2.4: Public participation. Encourage participation of local citizens, the business community, and interested groups and individuals in air quality planning and implementation.
- Policy 2.5: Public education. Promote programs that educate the public about regional air quality issues and solutions.
- Policy 2.6: Innovative mitigation. Encourage innovative mitigation measures to reduce air quality impacts by coordinating with the SJVAPCD, project applicants, and other interested parties.

3.7.3 IMPACTS AND MITIGATION MEASURES

GREENHOUSE GAS EMISSIONS THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the proposed Project would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Most individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For individual proposed projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The City of Clovis does not have a formal GHG emissions reduction plan (or any other form of a Climate Action Plan).

Therefore, the Project is assessed based on its consistency with the CARB's latest adopted Scoping Plan, including the Project's compliance with relevant Scoping Plan measures, as well as the latest RTP/SCS for the region within which the Project is located within (i.e., the Fresno Council of Governments (FCOG) 2022 RTP/SCS). It should be noted that the Scoping Plan is consistent with the AB 1279 GHG reduction targets of achieving carbon neutrality by 2045, and reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Therefore, consistency with the CARB's most recent Scoping Plan would also demonstrate consistency with the carbon neutrality requirements encapsulated by AB 1279.

This analysis provides a qualitative assessment of the Project's compliance with the applicable plans, policies, and regulations for the purposes of reducing greenhouse gas emissions to determine whether the project would have a significant impact on the environment relative to GHGs. Separately, disclosure of the Project's estimated construction and operation-related GHG emissions are provided for the purposes of disclosure.[3]

THRESHOLDS OF SIGNIFICANCE (ENERGY CONSERVATION)

Consistent with Appendices F and G of the CEQA Guidelines, energy-related impacts are considered significant if implementation of the proposed Project would do the following:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation;
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency;

To determine whether the proposed Project would result in a significant impact on energy use, this EIR includes an analysis of proposed Project energy use, as provided under *Impacts and Mitigation Measures* below.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: Project implementation would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Less than Significant)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and

[3] Project GHG emissions were provided using the latest version of CalEEMod (v2022.1), which represents the Air District's recommended modeling tool for estimating emissions for projects under CEQA.

agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the Project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to Project development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage.

The Project's short-term construction-related and long-term operational GHG emissions were estimated using the California Emission Estimator Model (CalEEMod)™ (v.2022.1). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., MT CO_2e), based on the global warming potential of the individual pollutants.

STATEWIDE GHG REDUCTION MEASURES THAT APPLY TO THE PROJECT

Several statewide GHG reduction strategies apply to the Project either directly or indirectly. A summary of these strategies is provided in Table 3.7-2, below.

TABLE 3.7-2: SUMMARY OF STATEWIDE GHG REDUCTION STRATEGIES THAT APPLY TO THE PROJECT

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
BUILDING COMPONENTS / FACILITY OPERATIONS		
Roofs/Ceilings/ Insulation	CAL Green Code (Title 24, Part 11) California Energy Code (Title 24, Part 6)	The Project must comply with efficiency standards regarding roofing, ceilings, and insulation. For example: <u>Roofs/Ceilings:</u> New construction must reduce roof heat island effects per CALGreen Code Section 106.11.2, which requires use of roofing materials having a minimum aged solar reflectance, thermal emittance complying with Sections A5.106.11.2.2 and A5.106.11.2.3, or a minimum aged Solar Reflectance Index as specified in Table A5.106.11.2.2 or A5.106.11.2.3. Roofing materials must also meet solar reflectance and thermal emittance standards contained in Title 20 Standards. <u>Roof/Ceiling Insulation</u>: Requirements for the installation of roofing and ceiling insulation (see Title 24, Part 6 Compliance Manual at Section 3.2.2).
Flooring	CALGreen Code	The Project must comply with efficiency standards regarding flooring materials. For example, for 80% of floor area receiving "resilient

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		flooring," the flooring must meet applicable installation and material requirements contained in CALGreen Code Section 5.504.4.6.
Window and Doors	California Energy Code	The Project must comply with fenestration efficiency requirements. For example, the choice of windows, glazed doors, and any skylights for the Project must conform to energy consumption requirements affecting size, orientation, and types of fenestration products used (see Title 24, Part 6 Compliance Manual, Section 3.3).
Building Walls/ Insulation	CALGreen Code California Energy Code	The Project must comply with efficiency requirements for building walls and insulation. Exterior Walls: Must meet requirements in the current edition of the California Energy Code and comply with Section A5.106.7.1 or A5.106.7.2 of CALGreen for wall surfaces, as well as Section 5.407.1, which requires weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2. Construction must also meet requirements contained in Title 24, Part 6, which vary by material of the exterior walls (see Title 24, Part 6 Compliance Manual, Part 3.2.3). Demising (Interior) Walls: Mandatory insulation requirements for demising walls (which separate conditioned from non-conditions space) differ by the type of wall material used (Title 24, Part 6 Compliance Manual Part 3.2.4). Door Insulation: Mandatory requirements for air infiltration rates to improve insulation efficiency; they differ according to the type of door (Title 24, Part 6 Compliance Manual Part 3.2.5). Flooring Insulation: Mandatory requirements for insulation that depend on the material and location of the flooring (Title 24, Part 6 Compliance Manual Part 3.2.6).
Finish Materials	CALGreen	The Project must comply with pollutant control requirements for finish materials. For example, materials including adhesives, sealants, caulks, paints and coatings, carpet systems, and composite wood products must meet requirements in CALGreen to ensure pollutant control (CALGreen Section 5.504.4).
Wet Appliances (Toilets/Faucets/Urinal, Dishwasher/Clothes Washer, Spa and Pool/Water Heater)	CALGreen, California Energy Code, Appliance Efficiency Regulations (Title 20 Standards)	Wet appliances associated with the Project must meet various efficiency requirements. For example: Pool: Use associated with the Project is subject to appliance efficiency requirements for service water heating systems and equipment and spa and pool heating systems and equipment (Title 24, Part 6, Sections 110.3, 110.4, 110.5; Title 20 Standards, Sections 1605.1(g), 1605.3(g); see also California Energy Code).

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		Toilets/Faucets/Urinals: Use associated with the Project is subject to new maximum rates for toilets, urinals, and faucets effective January 1, 2016 (Title 20 Standards, Sections 1605.1(h),(i) 1065.3(h),(i)): ■ Showerheads maximum flow rate 2.5 gallons per minute (gpm) at 80 pounds per square inch (psi) ■ Wash fountains 2.2 x (rim space in inches/20) gpm at 60 psi ■ Metering faucets 0.25 gallons per cycle ■ Lavatory faucets and aerators 1.2 gpm at 60 psi ■ Kitchen faucets and aerators 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi ■ Public lavatory faucets 0.5 gpm at 60 psi ■ Trough-type urinals 16 inches length ■ Wall mounted urinals 0.125 gallons per flush ■ Other urinals 0.5 gallons per flush Water Heaters: Use associated with the Project is subject to appliance efficiency requirements for water heaters (Title 20 Standards, Sections 1605.1(f), 1605.3(f)). Dishwasher/Clothes Washer: Use associated with the Project is subject to appliance efficiency requirements for dishwashers and clothes washers (Title 20 Standards, Sections 1605.1(o),(p),(q), 1605.3(o),(p),(q)).
Dry Appliances (Refrigerator/Freezer, Heater/Air Conditioner, Clothes Dryer)	Title 20 Standards CALGreen Code	Dry appliances associated with the Project must meet various efficiency requirements. For example: Refrigerator/Freezer: Use associated with the Project is subject to appliance efficiency requirements for refrigerators and freezers (Title 20 Standards, Sections 1605.1(a), 1605.3(a)). Heater/Air Conditioner: Use associated with the Project is subject to appliance efficiency requirements for heaters and air conditioners (Title 20 Standards, Sections 1605.1(b),(c),(d),(e), 1605.3(b),(c),(d),(e) as applicable). Clothes Dryer: Use associated with the Project is subject to appliance efficiency requirements for clothes dryers (Title 20 Standards, Section 1605.1(q)).
	CALGreen Code	Installations of heating, ventilation, and air conditioning; refrigeration and fire suppression equipment must comply with

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		CALGreen Sections 5.508.1.1 and 508.1.2, which prohibits CFCs, halons, and certain HCFCs and HFCs.
Lighting	Title 20 Standards	Lighting associated with the Project are subject to energy efficiency requirements contained in Title 20 Standards. General Lighting: Indoor and outdoor lighting associated with the Project must comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(j),(k),(n), 1605.3(j),(k),(n)). Emergency Lighting and Self-Contained Lighting: Project must also comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(l), 1605.3(l)). Emergency Lighting and Self-Contained Lighting: Project must also comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(l), 1605.3(l)). Traffic Signal Lighting: For any necessary Project improvements involving traffic lighting, traffic signal modules and traffic signal lamps will need to comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(m), 1605.3(m)).
	California Energy Code	Lighting associated with the Project will also be subject to energy efficiency requirements contained in Title 24, Part 6, which contains energy standards for non-residential indoor lighting and outdoor lighting (see Title 24 Part 6 Compliance Manual, at Sections 5, 6). Mandatory lighting controls for indoor lighting include, for example, regulations for automatic shut-off, automatic daytime controls, demand responsive controls, and certificates of installation (Title 24 Part 6 Compliance Manual at Section 5). Regulations for outdoor lighting include, for example, creation of lighting zones, lighting power requirements, a hardscape lighting power allowance, requirements for outdoor incandescent and luminaire lighting, and lighting control functionality (Title 24 Part 6 Compliance Manual Section 6).
	AB 1109	Lighting associated with the Project will be subject to energy efficiency requirements adopted pursuant to AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting to reduce electricity consumption 25% for indoor commercial lighting.
Bicycle and Vehicle Parking	CALGreen Code	The Project will be required to provide compliant bicycle parking, fuel-efficient vehicle parking, and electric vehicle (EV) charging spaces (CALGreen Code Sections 5.106.4, 5.106.5.1, 5.106.5.3).
	California Energy Code	The Project is subject to parking requirements contained in Title 24, Part 6. For example, parking capacity is to meet but not exceed minimum local zoning requirements, and the Project should employ

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		approved strategies to reduce parking capacity (Title 24, Part 6, Section 106.6).
Landscaping	CALGreen Code	CALGreen requires and has further voluntary provisions for the following: ■ A water budget for landscape irrigation use ■ For new water service, separate meters or submeters must be installed for indoor and outdoor potable water use for landscaped areas of 1,000 to 5,000 square feet ■ Provide water-efficient landscape design that reduces use of potable water beyond initial requirements for plant installation and establishment
	Model Water Efficient Landscaping Ordinance	The model ordinance promotes efficient landscaping in new developments and establishes an outdoor water budget for new and renovated landscaped areas that are 500 square feet or larger (CCR, Title 23, Division 2, Chapter 2.7).
Refrigerants	CARB Management of High GWP Refrigerants for Stationary Sources	Any refrigerants associated with the Project would be subject to CARB standards. CARB's Regulation for the Management of High GWP Refrigerants for Stationary Sources reduces emissions of high-GWP refrigerants from leaky stationary, non-residential refrigeration equipment; reduces emissions resulting from the installation and servicing of stationary refrigeration and air conditioning appliances using high-GWP refrigerants; and requires verification GHG emission reductions (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.).
Consumer Products	CARB High GWP GHGs in Consumer Products	All consumer products associated with the Project will be subject to CARB standards. CARB's consumer products regulations set VOC limits for numerous categories of consumer products, and limits the reactivity of the ingredients used in numerous categories of aerosol coating products (CCR, Title 17, Division 3, Chapter 1, Subchapter 8.5).
CONSTRUCTION		
Use of Off-Road Diesel Engines, Vehicles, and Equipment	CARB In-Use Off-Road Diesel Vehicle Regulation	Any relevant vehicle or machine use associated with the Project will be subject to CARB standards. The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; restricts the adding of older vehicles into fleets starting on January 1, 2014; and requires fleets to reduce their emissions by retiring, replacing, or repowering

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The requirements and compliance dates of the Off-Road Regulation vary by fleet size, as defined by the regulation.
Greening New Construction	CALGreen Code	All new construction, including the Project, must comply with CALGreen, as discussed in more detail throughout this table. Adoption of the mandatory CALGreen standards for construction has been essential for improving the overall environmental performance of new buildings; it also sets voluntary targets for builders to exceed the mandatory requirements.
Construction Waste	CALGreen Code	The Project would be subject to CALGreen requirements for construction waste reduction, disposal, and recycling, such as a requirement to recycle and/or salvage for reuse a minimum of 50% of the non-hazardous construction waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3, or meet a local construction and demolition waste management ordinance, whichever is more stringent.
SOLID WASTE		
Solid Waste Management	Landfill Methane Control Measure	Waste associated with the Project would be disposed of per state requirements for landfills, material recovery facilities, and transfer stations. Per the statewide GHG emissions inventory, the largest emissions from waste management sectors come from landfills and are in the form of methane (CH_4). In 2010, CARB adopted a regulation that reduces emissions from CH_4 in landfills, primarily by requiring owners and operators of certain uncontrolled municipal solid waste landfills to install gas collection and control systems, and requires existing and newly installed gas and control systems to operate in an optimal manner. The regulation allows local air districts to voluntarily enter into a memorandum of understanding with CARB to implement and enforce the regulation and to assess fees to cover costs of implementation.
	Mandatory Commercial Recycling (AB 341)	AB 341 will require the Project, if it generates 4 cubic yards or more of commercial solid waste per week, to arrange for recycling services using one of the following: self-haul, subscribe to a hauler, arrange for pickup of recyclable materials, or subscribe to a recycling service that may include mixed waste processing that yields diversion results comparable to source separation. The Project will also be subject to local commercial solid waste recycling programs required to be implemented by each jurisdiction under AB 341.
	CALGreen Code	The Project will be subject to CALGreen requirements to provide areas that serve the entire building and are identified for depositing,

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		storing, and collecting nonhazardous materials for recycling (CALGreen Code Section 5.410.1).
		ENERGY USE
Renewable Energy	California RPS (SB X1-2, SB 350, SB 100, and SB 1020)	Energy providers associated with the Project will be required to comply with the RPS set by SB X1 2, SB 350, and SB 100. SB X1 2 required investor-owned utilities, publicly owned utilities, and electric service providers to increase purchases of renewable energy such that at least 33% of retail sales are procured from renewable energy resources by December 31, 2020. In the interim, each entity was required to procure an average of 20% of renewable energy for the period of January 1, 2011 through December 31, 2013; and were required to procure an average of 25% by December 31, 2016, and 33% by 2020. SB 350 requires retail sellers and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030. SB 100 increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045. SB 1020 built on the standards set forth in SB 100, establishing that 90% of the retail sales of electricity must be carbon free by 2035, 95% must be carbon free by 2040, and, as stated in SB 100, 100% must be carbon free by 2045.
	California Solar Initiative-Thermal Program	Multifamily properties qualify for rebates of up to $800,000 on solar water heating systems and eligible solar pool heating systems qualify for rebates of up to $500,000. Funding for the California Solar Initiative –Thermal program comes from ratepayers of Pacific Gas & Electric, SCE, Southern California Gas Company, and San Diego Gas & Electric. The rebate program is overseen by the CPUC as part of the California Solar Initiative.
		VEHICULAR/MOBILE SOURCES
General	SB 375 and RTP/SCS	The Project complies with, and is subject to, the Fresno Council of Governments RTP/SCS adopted in 2022, as shown in Table 3.7-6 below.
Fuel	Low Carbon Fuel Standard (LCFS)/ EO S-01-07	Auto trips associated with the Project will be subject to the Low Carbon Fuel Standard (EO S-01-07), which required a 10% or greater reduction in the average fuel carbon intensity by 2020 with a 2010 baseline for transportation fuels in California regulated by CARB. The program establishes a strong framework to promote the low carbon

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG goals.
Automotive Refrigerants	CARB Regulation for Small Containers of Automotive Refrigerant	Vehicles associated with the Project will be subject to CARB's Regulation for Small Containers of Automotive Refrigerant (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.). The regulation applies to the sale, use, and disposal of small containers of automotive refrigerant with a GWP greater than 150. The regulation achieves emission reductions through implementation of four requirements: use of a self-sealing valve on the container, improved labeling instructions, a deposit and recycling program for small containers, and an education program that emphasizes best practices for vehicle recharging. This regulation went into effect on January 1, 2010, with a 1-year sell-through period for containers manufactured before January 1, 2010. The target recycle rate was initially set at 90%, and rose to 95% beginning January 1, 2012.
Light-Duty Vehicles	AB 1493 (or the Pavley Standard)	Cars that drive to and from the Project will be subject to AB 1493, which directed CARB to adopt a regulation requiring the maximum feasible and cost-effective reduction of GHG emissions from new passenger vehicles. Pursuant to AB 1493, CARB adopted regulations that established a declining fleet average standard for CO2, CH4, N2O, and HFCs (air conditioner refrigerants) in new passenger vehicles and light-duty trucks beginning with the 2009 model year and phased-in through the 2016 model year. These standards were divided into those applicable to lighter and those applicable to heavier portions of the passenger vehicle fleet. The regulations will reduce "upstream" smog-forming emissions from refining, marketing, and distribution of fuel.
	Advanced Clean Car and ZEV Programs	Cars that drive to and from the Project will be subject to the Advanced Clean Car and ZEV Programs. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles (ZEVs) into a single package of standards called Advanced Clean Cars. By 2025, new automobiles will emit 34% less global warming gases and 75% less smog-forming emissions. The ZEV Program will act as the focused technology of the Advanced Clean Cars Program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018–2025 model years. The Advanced Clean Cars II (ACC II) regulation builds on the Advanced Clean Cars (ACC) rule adopted in 2012. ACC II decreases emissions by increasing EV sales via two programs. First, the under the ZEV program, original equipment manufacturers (OEMs) must increase sales of ZEV vehicles from 35 percent in 2026 to 100 percent in 2035.

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		Second, ACC II further strengthened the LEV program discussed above, with more stringent emission standards beginning with model year 2025.
	Tire Inflation Regulation	Cars that drive to and from the Project will be subject to the CARB Tire Inflation Regulation, which took effect on September 1, 2010, and applies to vehicles with a gross vehicle weight rating of 10,000 pounds or less. Under this regulation, automotive service providers must, inter alia, check and inflate each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service, to keep a copy of the service invoice for a minimum of 3 years, and to make the vehicle service invoice available to the CARB or its authorized representative upon request.
	EPA and NHTSA GHG and CAFÉ standards.	Mobile sources that travel to and from the Project site would be subject to EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200).
Medium-and Heavy-Duty Vehicles	CARB In-Use On-Road Heavy-Duty Diesel Vehicles Regulation (Truck and Bus Regulation)	Any heavy-duty trucks associated with the Project will be subject to CARB standards. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The regulation applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. To further reduce emissions, the Advanced Clean Truck Act (ACT) requires original equipment manufacturers of medium- and heavy-duty vehicles to sell ZEVs or near-zero-emissions vehicles (NZEVs) such as plug-in electric hybrids as an increasing percentage of their annual sales from 2024 to 2035. The ACT includes a cap-and-trade system, capping the number of fossil fuel vehicles sold by stipulating annual sales percentage requirements. Manufacturers can comply with the ACT by generating compliance credits through the sale of ZEVs or NZEVs or through the trading of compliance credits.
	CARB In-Use Off-Road Diesel Vehicle Regulation	Any relevant vehicle or machine use associated with the Project will be subject to CARB standards. The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulations impose limits on idling, require a written idling policy, and require a disclosure when selling vehicles; require all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; restricted the adding of older vehicles into fleets starting on January 1, 2014; and require fleets to

PROJECT COMPONENT	*APPLICABLE LAWS/REGULATIONS*	*GREENHOUSE GAS REDUCTION MEASURES REQUIRED FOR PROJECT*
		reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The requirements and compliance dates of the Off-Road regulation vary by fleet size, as defined by the regulation.
	Heavy-Duty Vehicle GHG Emission Reduction Regulation	Any relevant vehicle or machine use associated with the Project will be subject to CARB standards. The CARB Heavy-Duty Vehicle GHG Emission Reduction Regulation applies to heavy-duty tractors that pull 53-foot or longer box-type trailers (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.). Fuel efficiency is improved through improvements in tractor and trailer aerodynamics and the use of low rolling resistance tires.
	EPH and NHTSA GHG and CAFÉ standards.	Mobile sources that travel to and from the Project site would be subject to EPA and NHTSA GHG and CAFE standards for medium-and heavy-duty vehicles (76 FR 57106–57513).
WATER USE		
Water Use Efficiency	Emergency State Water Board Regulations	Water use associated with the Project will be subject to emergency regulations. On May 18, 2016, partially in response to EO B-27-16, the State Water Board adopted emergency water use regulations (CCR, title 23, Section 864.5 and amended and re-adopted Sections 863, 864, 865, and 866). The regulation directs the State Water Board, Department of Water Resources, and CPUC to implement rates and pricing structures to incentivize water conservation, and calls upon water suppliers, homeowner's associations, California businesses, landlords and tenants, and wholesale water agencies to take stronger conservation measures.
	SB X7-7	Water provided to the Project will be affected by SB X7-7's requirements for water suppliers. SB X7-7, or the Water Conservation Act of 2009, requires all water suppliers to increase water use efficiency. It also requires, among other things, that the Department of Water Resources, in consultation with other state agencies, develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies.
	CALGreen Code	The Project is subject to CALGreen's water efficiency standards, including a required 20% mandatory reduction in indoor water use (CALGreen Code, Division 4.3).
	California RPS	Electricity usage associated with Project water and wastewater

SHORT-TERM CONSTRUCTION GHG EMISSIONS

Estimated maximum GHG emissions associated with construction of the proposed Project are summarized in Table 3.7-3. These emissions include all worker vehicle, vendor vehicle, hauler

vehicle, and off-road construction vehicle GHG emissions. For the purposes of this analysis, based on input from the Project applicant, the proposed Project is assumed to commence construction in late 2024 and finish in late 2029. See Appendix C for further detail.

TABLE 3.7-3: TOTAL CONSTRUCTION GHG EMISSIONS (MT CO_2E/YEAR)

YEAR	BIO- CO_2	NON-BIO-CO_2	TOTAL CO_2	CH_4	N_2O	REFRIGERANTS	CO_2E
2024	0	134	134	<0.1	<0.1	<0.1	135
2025	0	726	726	<0.1	<0.1	<0.1	729
2026	0	2,395	2,395	0.1	0.2	2.7	2,449
2027	0	2,429	2,429	0.1	0.2	2.8	2,485
2028	0	2,392	2,392	0.1	0.2	2.5	2,446
2029	0	2,342	2,342	0.1	0.2	2.2	2,393
Total	**0**	**10,418**	**10,418**	**0.4**	**1.0**	**10**	**10,367**

SOURCES: CALEEMOD (V.2022.1)

As presented in the table, short-term construction emissions of GHGs are estimated to be a total of approximately 10,367 MT CO_2e.

OPERATIONAL GHG EMISSIONS

The operational GHG emissions estimate for the proposed Project includes on-site area, energy, mobile, waste, and water emissions. Estimated GHG emissions associated with operation of the proposed Project are summarized in Table 3.7-4, below. It should be noted that CalEEMod does not account for Governor Newsom's Zero-Emission by 2035 Executive Order (N-79-20), which requires that all new cars and passenger trucks sold in California be zero-emission vehicles by 2035; CalEEMod also does not account for the new CARB rules related to truck electrification (e.g. Advanced Clean Trucks Regulation). This is anticipated to substantially reduce the operational emissions associated with vehicles (i.e., mobile emissions) over time. The operational emissions results provided in Table 3.7-4 are likely an overestimate for mobile emissions, given the state's ongoing effort to increase electric vehicles and trucks. As shown in the following tables (Table 3.7-4 and Table 3.7-5), the annual GHG emissions associated with the proposed Project would be approximately 53,518 MT CO_2e under the unmitigated scenario, and 52,051 MT CO_2e under the mitigated scenario (i.e. with implementation of the mitigation measures provided in *Section 3.3: Air Quality* of the Draft EIR).

TABLE 3.7-4: OPERATIONAL GHG EMISSIONS AT BUILDOUT (METRIC TONS/YEAR) - UNMITIGATED

CATEGORY	BIO- CO_2	NON-BIO-CO_2	TOTAL CO_2	CH_4	N_2O	REFRIGERANTS	CO_2E
Mobile	0	40,895	40,895	1.7	2.1	43.3	41,612
Area	0	49.2	49.2	0.0	0.0	0	49.4
Energy	0	10,308	10,308	1.2	0.1	0	10,360
Water	69.5	152	221	7.2	0.2	0	451
Waste	297	0	297	29.7	0	0	1,039
Refrig.	0	0	0	0	0	6.1	6.1

Total	**367**	**51,403**	**51,770**	**39.7**	**2.4**	**49.3**	**53,518**

SOURCES: CALEEMOD (V.2022.1)

TABLE 3.7-5: OPERATIONAL GHG EMISSIONS AT BUILDOUT (METRIC TONS/YEAR) - MITIGATED

CATEGORY	*BIO- CO_2*	*NON-BIO- CO_2*	*TOTAL CO_2*	*CH_4*	*N_2O*	*REFRIGERANTS*	*CO_2E*
Mobile	0	40,895	40,895	1.7	2.1	43.3	41,612
Area	0	0	0	0	0	0	0
Energy	0	8,904	8,904	0.9	0.1	0	8,942
Water	69.5	152	221	7.2	0.2	0	451
Waste	297	0	297	29.7	0	0	1,039
Refrig.	0	0	0	0	0	6.1	6.1
Total	**367**	**49,950**	**50,317**	**39.5**	**2.4**	**49.3**	**52,051**

SOURCES: CALEEMOD (V.2022.1)

CONSISTENCY WITH 2022 SCOPING PLAN

The CARB's 2022 Scoping Plan (the latest version of the Scoping Plan) provides policies that are considered needed to meet the State's mid-term and long-term GHG emissions reduction targets. Specifically, the CARB's *Final* 2022 Scoping Plan identifies that it "…lays out the sector-by-sector roadmap for California, the world's fifth largest economy, to achieve carbon neutrality by 2045 or earlier…". The Scoping Plan addresses recent legislation and direction from Governor Newsom, by extending and expanding upon the earlier Scoping Plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, and adding carbon neutrality as a science-based guide and touchstone for California's climate work. The Scoping Plan is therefore consistent with the AB 1279 GHG reduction targets of achieving carbon neutrality by 2045, and reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. The Project's consistency with the applicable 2022 Scoping Plan policies is discussed in Table 3.7-6, below.

TABLE 3.7-6: PROJECT CONSISTENCY WITH THE 2022 SCOPING PLAN

POLICY	*PROJECT CONSISTENCY*
Transportation Electrification	
Convert local government fleets to ZEVs and provide EV charging at public sites	**No Conflict.** While this goal is not applicable to an individual residential or commercial development project, the Project includes an EV parking requirement and includes EV spaces consistent with the requirements of the California Energy Code (CCR Title 24, Part 6).
Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans)	
VMT Reduction	
Reduce or eliminate minimum parking standards	**No Conflict.** Although this goal is not applicable to an individual residential or commercial development project, the Project is implementing neighborhood design improvements such as
Implement Complete Streets policies and investments, consistent with general plan circulation element requirements	
Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit,	

POLICY	*PROJECT CONSISTENCY*
etc.	pedestrian network improvements and traffic calming measures. Furthermore, the proposed Project would enable walkable development.
Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking	
Implement parking pricing or transportation demand management pricing strategies	
Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood)	
Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)	
Building Decarbonization	
Adopt all-electric new construction reach codes for residential and commercial uses	**No Conflict.** Although this goal is not applicable to an individual residential or commercial development project, the Project would be consistent with the applicable Title 24 Building Envelope Energy Efficiency Standards, which ensure highly energy efficient development. Additionally, the proposed Project would utilize electricity from PG&E, which has been increasing its overall supply of renewable energy as part of its overall energy portfolio, consistent with the State's Renewable Portfolio Standard. More detail is provided under Impact 3.7-2, below.
Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers)	
Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances	
Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	
Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings)	

SOURCE: 2022 SCOPING PLAN, TABLE 1, APPENDIX D

The proposed Project's operational emissions would be reduced as regulations are implemented by the CARB and other State agencies to comply with the statewide GHG reduction targets. Many of these regulations are already identified in the 2022 Scoping Plan. These statewide actions are anticipated to reduce operational GHG emissions even further below those identified in Table 3.7-3, Table 3.7-4, and Table 3.7-5. For example, the proposed Project's transportation emissions would be expected to decline as vehicle efficiency standards are implemented beyond the Advanced Clean Cars II program and the Low Carbon Fuel Standard is strengthened. Furthermore, CalEEMod does not account for Governor Newsom's Zero-Emission by 2035 Executive Order (N-79-20) or CARB's subsequent regulations, which requires that all new cars and passenger trucks sold in California be zero-emission vehicles by 2035. This is anticipated to substantially reduce the operational emissions associated with passenger vehicles (i.e. mobile emissions) further, over time.

Overall, the proposed Project would not conflict with the 2022 Scoping Plan. The proposed Project would be developed according to the latest State and federal regulatory requirements, including

those associated with operational building energy efficiency. Therefore, the Project would be considered consistent with the 2022 Scoping Plan. Based on this, recognizing the CARB as an authoritative substantial evidence source in evaluating post-2020 GHG impacts, since the proposed Project would be consistent with the CARB's 2022 Scoping Plan, buildout of the proposed Project would not interfere with the main programs the CARB has identified to support its conclusions that the State is on a trajectory to meet the 2045 GHG target. Overall, the proposed Project would not impede the 2022 Scoping Plan and would help the State to progress towards this target.

CONSISTENCY WITH FRESNO COG'S 2022 RTP/SCS

The Fresno COG's 2022 RTP/SCS includes five goals with corresponding policies for improving mobility and accessibility, connecting communities with accessible transportation options, creating a safe, well-maintained, efficient, and climate-resilient multimodal transportation network, adding to a transportation network that supports a sustainable and vibrant economy, and embracing clean transportation, technology, and innovation. These goals include similar measures to the 2022 Scoping Plan. The Project's consistency with the applicable 2022 RTP/SCS strategies is discussed in Table 3.7-7, below.

TABLE 3.7-7: PROJECT CONSISTENCY WITH THE FRESNO COG'S 2022 RTP/SCS

GOAL	*PROJECT CONSISTENCY*
GOAL 1: Improved mobility and accessibility for all	**No Conflict**. The Project would support EV-ready charging spaces, consistent with the requirements of the latest version of the Title 24 Building Energy Efficiency Standards. In addition, although this Project is not a transportation improvement project, the Project is in a city where regional transit improvements are planned. Moreover, the proposed Project would include many project features that improve mobility and accessibility, including providing pedestrian network improvements.
GOAL 2: Vibrant communities that are accessible by sustainable transportation options	**No Conflict**. The Project is a residential, commercial, and mixed-use development project, which would create a vibrant new community adjacent to existing residential communities with pedestrian network, roadway, and bicycle improvements. Overall, the proposed Project would be well-connected to the rest of the City of Clovis and the region, as well as provide a wide variety of multi-modal and sustainable transportation options.
GOAL 3: A safe, well-maintained, efficient, and climate-resilient multimodal transportation network	**No Conflict**. The Project is a residential, commercial, and mixed-use development project, which would provide a wide variety of multi-modal and sustainable transportation options, thereby reducing impacts on climate due to greenhouse gas emissions.
GOAL 4: A transportation network that supports a sustainable and vibrant economy	**No Conflict**. The proposed Project would create local jobs as well as provide new shopping options for local and regional residents, thereby supporting a sustainable and vibrant economy.
GOAL 5: A region embracing clean transportation, technology, and innovation.	**No Conflict**. The proposed Project would provide for EV parking spaces, mixed-use development, create a modern and vibrant pedestrian and bicycle network, and provide for the potential expansion of bus services to the Project site (including the potential for low- or no emissions bus services). This would ensure that the project would help support the region in embracing clean transportation, technology, and innovation.

SOURCE: FRESNO COG 2022 RTP/SCS

As shown in Table 3.7-7, above, the Project would not conflict with any of the GHG emissions reduction strategies contained in the Fresno COG 2022 RTP/SCS. Therefore, the Project would be consistent with Fresno COG's 2022 RTP/SCS.

EXECUTIVE ORDER S-3-05

The Executive Order S-3-05 2050 target has not been codified by legislation. However, studies have shown that, to meet the 2050 target, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the project's impacts further relative to the 2050 goal is speculative for purposes of CEQA.[4]

The CARB recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, the CARB's First Update to the Scoping Plan "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by the CARB would serve to reduce the proposed project's post-2020 emissions level to the extent applicable by law:

- Energy Sector: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.
- Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero-emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.
- Water Sector: The project's emissions level will be reduced because of further utilization of water conservation technologies.
- Waste Management Sector: Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

In his January 2015 inaugural address, Governor Brown expressed a commitment to achieve "three ambitious goals" that he wanted to see accomplished by 2030 to reduce the State's GHG emissions:

[4] California Air Resources Board (CARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed September 11, 2023.

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the State agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change.[5]

Further, studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.[6]

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

MORE STRINGENT TITLE 24 STANDARDS

The proposed Project would be required to comply with the latest (i.e., 2022) version of the Title 24 standards, which are more stringent than the 2019 Title 24 standards that are modeled in CalEEMod.[7] Therefore, proposed Project emissions would continue to decline beyond the buildout year due to regulations that would indirectly affect Project emissions. Moreover, the Title 24 standards are anticipated to be revised again in Year 2025, with even stricter energy efficiency and

[5] Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. April 29, 2015.
Website: https://www.gov.ca.gov/news.php?id=18938. Accessed February 2, 2021.

[6] Energy and Environmental Economics, 2015. Pathways to Deep Carbonization in the United States.
Website: http://deepdecarbonization.org/wp-content/uploads/2015/11/US_Deep_Decarbonization_Technical_Report_Exec_Summary.pdf. Accessed June 8, 2022.

[7] Since the latest version of CalEEMod (v.2022.1) only accounts for the energy efficiency requirements associated with the 2019 version of Title 24, and since there is no well-established methodology for quantifying the reductions in energy consumption associated with the 2022 version of Title 24 over the 2019 version of Title 24, the CalEEMod modeling does not account for the energy efficiency improvements that would be associated with the 2022 (or future, more stringent) versions of Title 24.

renewable energy requirements for new development, which help to ensure that new development is consistent with the State's GHG reduction goals, consistent with the Scoping Plan.[8] These improvements to the Title 24 standards will be reflected in per capita GHG emission reductions at the Project buildout.

CONSISTENCY WITH THE SJVAPCD REQUIREMENTS

The proposed Project would be required to comply with all applicable SJVAPCD (i.e., Air District) Rules and regulations. For example, Regulations and rules that may apply to the proposed Project could include Regulation VIII that provides fugitive PM_{10} dust prohibitions; Rule 8021 that provides rules for PM_{10} dust prohibition associated with construction, demolition activities, excavation, extraction, and other earthmoving activities; Rule 4601 that provides rules to limit VOC emissions for architectural coatings. Moreover, the proposed Project would be required to comply with SJVAPCD Rule 9510, as described in further detail below.

SJVAPCD'S RULE 9510

In accordance with the SJVAPCD's Rule 9510, an Air Impact Assessment (AIA) is required to be prepared for the proposed Project based on the applicability and exemption criteria of the rule.[9] The rule includes general mitigation requirements for construction and/or operational emissions. Per the general mitigation requirements of Rule 9510, the Project would be required to reduce the Project's operational baseline NOx emissions 33.3%, and the Project's operational baseline PM_{10} emissions 50%, over a period of 10 years as quantified in the approved AIA. Although the purpose of Rule 9510 is to reduce NOx and PM_{10} emissions, rather than GHG emissions, it should be noted that these reductions are enforced through on- and off-site measures, many of which would also reduce GHG emissions. For example, according to the SJVAPCD's most recent Indirect Source Review Program annual report (*the Indirect Source Review Program 2022 Annual Report, July 1, 2021 to June 30, 2022*), during the reporting period (July 1, 2021 through June 30, 2022), the District spent ISR monies to fund clean-air emission reduction projects, including off-site projects such as the replacement of older, higher-emitting agricultural tractors with new latest-tier tractors, replacement of older, higher-emitting agricultural irrigation water pump engines with electric motors, retrofitting of residential open-hearth fireplaces with certified natural gas burning inserts, and a dairy feed mixer electrification project. Total off-site emission reductions alone for the reporting period totaled 50 tons of NOx and 86 tons of PM_{10}, for a paid-out total of $3,458,048, and a cost effectiveness of $25,438/ton.[10]

These off-site emission reductions have the ancillary benefit of reducing GHG emissions, beyond what has been modeled herein. For example, the reduction in carbon intensity of natural gas burning inserts compared with open-hearth fireplaces is improved by 39.7%, according to data from

[8] See: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency
[9] Available at: https://www.valleyair.org/rules/currntrules/r9510-a.pdf. Accessed: September 2022.
[10] See the SJVAPCD's Indirect Source Review Rule Annual Report (2022) for more detail: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/isr-annual-report/

Appendix G of the latest version of the CalEEMod v2022.1 Guidebook.[11] Although the reductions in GHGs will be attributed to the proposed Project through the Rule 9510 ISR, these reductions are not reflected in the Project GHG modeling estimates included herein, except that the modeling estimates do reflect that fact that the Project does not include any open-hearth fireplaces. It is notable, however, that the GHG reductions are projected to be substantial and are in alignment with the goals of the 2022 Scoping Plan.

CONCLUSION

The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS. This would ensure that the proposed Project would be consistent with, and would not impair, the State's carbon neutrality standard by year 2045 as established under AB 1279. The State is making progress toward reducing GHG emissions in key sectors such as transportation, industry, and electricity. Since the Project would be consistent with State GHG Plans, it would not impede the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and of achieving carbon neutrality by 2045. The proposed Project would make a reasonable fair share contribution to the State's GHG reduction goals, by implementing a wide array of Project features that would substantially reduce GHG emissions and therefore, the proposed Project's GHG emissions would be considered to have a ***less than significant*** impact.

THRESHOLDS OF SIGNIFICANCE (ENERGY CONSERVATION)

Consistent with Appendices F and G of the CEQA Guidelines, energy-related impacts are considered significant if implementation of the proposed Project would do the following:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation;
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency;

To determine whether the proposed Project would result in a significant impact on energy use, this EIR includes an analysis of proposed Project energy use, as provided under *Impacts and Mitigation Measures* below.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-2: Project implementation would not result in the inefficient, wasteful, or unnecessary use of energy resources, and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Less than Significant)

According to the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed Project would be considered

[11] See Table G-23 of the CalEEMod v2022.1 Appendix (Appendix G) for detail.

"wasteful, inefficient, and unnecessary" if it were to violate State and federal energy standards and/or result in significant adverse impacts related to Project energy requirements, energy inefficiencies, energy intensiveness of materials, effects on local and regional energy supplies or on requirements for additional capacity, compliance with existing energy standards, effects on energy resources, or transportation energy use requirements. In addition, the Project could have a significant energy impact if it would conflict or create an inconsistency with an applicable plan, policy, or regulation for renewable energy or energy efficiency.

The proposed Project includes various characteristics that reduce the inefficient, wasteful, or unnecessary use of energy. Overall, a wide variety of additional Project features would also be implemented that would substantially reduce energy emissions. For example, the Project would comply with State requirements such as the energy efficiency requirements of the latest version of the California Title 24 Energy Efficiency Standards. The Project is also anticipated to produce on-site solar photovoltaic (PV) for on-site use, also consistent with the latest version of the California Title 24 Energy Efficiency Standards.

Moreover, it should be noted that, over time, electrification of the vehicles will increase due to state requirements, and state and national trends. Electric charging infrastructure would be installed on the property to facilitate the conversion of the truck fleet to zero-emission electric trucks as they become available in the market and used for truck deliveries to and from the facility.

The amount of energy used by the proposed Project during operation would include the amount of energy used by Project buildings and outdoor lighting, and the fuel used by vehicle trips generated during Project construction and operation, fuel used by off-road construction vehicles during construction activities, and fuel used by Project maintenance activities during Project operation. The following discussion provides a detailed calculation of energy usage expected for the proposed Project, as provided by applicable modelling software (i.e., CalEEMod v2022.1) and the CARB Emission Factor model (EMFAC2021). Additional assumptions and calculations are provided within Appendix C of this EIR.

ELECTRICITY AND NATURAL GAS

Electricity and natural gas used by the proposed Project would be used primarily to generate energy for Project buildings, as well as for landscaping, street and outdoor parking lot lighting. As shown in further detail in the CalEEMod modeling outputs provided in Appendix C, "Energy" is one of the categories that was modeled for GHG emissions. As also shown in the CalEEMod modeling outputs as provided in Appendix C, the proposed Project as a whole (inclusive of both MPArea 1 and MPArea 2) is anticipated to consume approximately 56,760,239 kWh of electricity per year and approximately 185,705,393 kBTU per of natural gas per year (see Appendix C for detail). Moreover, this is likely a conservative estimate, given that the CalEEMod model does not account for the latest version of Title 24. Furthermore, this also does not account for additional Project's energy efficiency commitments and/or requirements, which would likely drive down the energy usage even further than identified herein. It should also be noted that although the Project would not utilize natural gas in MPArea 1, it was assumed that natural gas would be utilized within MPArea 2, for the purposes of modeling.

The proposed Project's buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Title 24 Energy Efficiency Standards for Residential Buildings and Green Building Code Standards. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting, are widely regarded as the some of the most advanced and stringent building energy efficiency standards in the country. In addition, the on-site solar PV system would meet the State legal requirements. As such, the design of the proposed project would facilitate the future commitment to renewable energy resources. Therefore, building energy consumption would not be considered wasteful, inefficient, or unnecessary.

ON-ROAD VEHICLES (OPERATION)

The proposed Project would generate vehicle trips (i.e., passenger vehicles for employees and heavy-duty trucks for hauling) during its operational phase. Compliance with applicable State laws and regulations would limit idling and a part of a comprehensive regulatory framework that is implemented by the CARB. A description of Project operational on-road mobile energy usage is provided below.

According to the *Clovis Vista Ranch CEQA Transportation Evaluation* prepared for the proposed Project (Kittelson & Associates, 2024), and as described in more detail in Section 3.13 of this EIR, the proposed Project would increase total vehicle trips by approximately 44,441 new daily trips. To calculate operational on-road vehicle energy usage, De Novo Planning Group used fleet mix data from the CalEEMod (v.2022.1) output for the proposed Project, and Year 2025 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2021, to derive weighted average gasoline and diesel MPG factors for the vehicle fleet. Based on these calculations, as provided in Appendix C, upon full buildout, the proposed Project would generate operational vehicle trips that would use a total of approximately 10,320 gallons of gasoline and 2,101 gallons of diesel per day, or 3,766,659 gallons of gasoline and 766,790 gallons of diesel per year.

ON-ROAD VEHICLES (CONSTRUCTION)

The proposed Project would also generate on-road vehicle trips during Project construction (from construction workers and vendors travelling to and from the Project site). De Novo Planning Group estimated the vehicle fuel consumed during these trips based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2023 gasoline and diesel MPG factors provided by EMFAC2021 (year 2023 factors were used to represent a conservative analysis, as the energy efficiency of construction activities is anticipated to improve over time). For the sake of simplicity and to be conservative, it was assumed that all construction worker light duty passenger cars and truck trips use gasoline as a fuel source, and all medium and heavy-duty vendor trucks use diesel fuel. Table 3.7-8, below, describes gasoline and diesel fuel consumed during each construction phase (in aggregate). As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed Project would occur during the building construction phase. See Appendix C of this EIR for a detailed accounting of construction on-road vehicle fuel usage estimates.

TABLE 3.7-8: ON-ROAD MOBILE FUEL USAGE BY PROJECT CONSTRUCTION ACTIVITIES – BY PHASE [A]

CONSTRUCTION PHASE	*TOTAL GALLONS OF GASOLINE FUEL[(B)]*	*TOTAL GALLONS OF DIESEL FUEL[(B)]*
Demolition	193	1,269
Site Preparation	711	0
Grading	872	0
Building Construction	33,543	159,022
Paving	1,141	0
Architectural Coatings	5,028	0
Total	**41,488**	**160,291**

NOTE: [(A)] PROVIDED BY CALEEMOD OUTPUT. [(B)]SEE APPENDIX C OF THIS EIR FOR FURTHER DETAIL

SOURCE: CALEEMOD (V.2022.1); EMFAC2021.

OFF-ROAD EQUIPMENT (CONSTRUCTION)

Off-road construction equipment would use diesel fuel during the construction phase of the proposed Project. A non-exhaustive list of off-road constructive equipment expected to be used during the construction phase of the proposed Project includes: forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by the proposed Project (as provided by the CalEEMod output), and standard conversion factors (as provided by the U.S. Energy Information Administration), the proposed Project would use a total of approximately 82,598 gallons of diesel fuel for off-road construction equipment. Detailed calculations are provided in Appendix C of this EIR.

State laws and regulations would limit idling from both on-road and off-road diesel-powered equipment and are part of a comprehensive regulatory framework that is implemented by the CARB. Additionally, as a practical matter, it is reasonable to assume that the overall construction schedule and process would be designed to be as efficient as feasible to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for further future efficiency gains during construction are limited. For the foregoing reasons, it is anticipated that the construction phase of the project would not result in wasteful, inefficient, and unnecessary consumption of energy.

CONCLUSION

The proposed Project would use energy resources for the operation of Project buildings (natural gas and electricity), outdoor lighting (electricity), on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed Project, and off-road and on-road construction activities associated with the proposed Project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, including through the mitigation measures provided throughout this EIR, as well as through the implementation of statewide and local measures.

The proposed Project would comply with all applicable federal, State, and local regulations regulating energy usage. Moreover, much of the electricity demand of the proposed Project would

come from on-site renewable sources such as rooftop solar PV. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Moreover, the proposed Project would comply with the City's General Plan goals, objectives and policies related to energy conservation that are relevant to this analysis.

The proposed Project would comply with all existing energy standards and would not be expected to result in significant adverse impacts on energy resources. For these reasons, the proposed Project would not cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the energy-related thresholds as described by the *CEQA Guidelines*. This is a ***less than significant*** impact.

The purpose of this section is to disclose and analyze the potential impacts associated with hazards, hazardous materials and wildfires related to the Project site and general vicinity, and to analyze the potential for exposure of people to hazards and hazardous materials as the Project is built and operated in the future. Information in this section is derived primarily from:

- *Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-25, 557-031-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023. Krazan & Associates, Inc. (See Appendix G.)*
- *Phase I Environmental Site Assessment, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. February 24, 2021. Krazan & Associates, Inc. (See Appendix G.)*
- *Report of Findings, Phase II Limited Subsurface Survey and Soil Pile Sampling, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. August 30, 2021. Krazan & Associates, Inc. (See Appendix G.)*
- *2014 Clovis General Plan* (City of Clovis, 2014);
- *2014 Clovis General Plan Draft Program Environmental Impact Report* (City of Clovis, 2014);
- *2000 Fresno County General Plan* (City of Clovis, 2000);
- *2018 Fresno County Zoning Ordinance* (City of Clovis, 2018);
- *City of Clovis Municipal Code, Title 9 – Development Code* (City of Clovis, 2022).

There was one comment received during the Notice of Preparation (NOP) comment period regarding hazards and hazardous materials from the County of Fresno Department of Public Health, Environmental Health Division (November 2, 2023). All comments are included in Appendix A.

3.8.1 ENVIRONMENTAL SETTING

PHYSICAL SETTING

Project Location

The Vista Ranch Project (Project) is located directly north of the City of Clovis (City) limit line, in unincorporated Fresno County (County). The Project site consists of approximately 952 acres located within the City's Planning Area and is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues. Figures 2.0-1 and 2.0-2 show the proposed Project's regional location and vicinity. The Project site is located within portions of Sections 21, 22, and 23 of Township 12 South, Range 21 East, Mount Diablo Base and Meridian (MDBM).

Existing Site Uses

The Project site is approximately 952 acres and includes 139 Assessor Parcels. Figure 2.0-3 depicts the parcels within the Project site and the proposed new SOI boundary, with specific Assessor Parcel Numbers (APNs) identified for the Master Plan area. In addition, APNs 557-031-30, -32S, -34, -36, -38, -40, -43S, and -45 are located along the north side of Shepherd Avenue and are owned by the City of Clovis for future roadway rights-of-way.

Presently, the Project site consists of a combination of fallow and grazing land, several rural residences, offices and Contractor's Corp Yard, and small tree nursery. The proposed Master Plan portion of the Project site is bifurcated by the Big Dry Creek Reservoir Outlet Works Channel. East Shepherd Avenue, along the southern boundary, is identified as an Expressway in the Clovis General Plan Circulation Plan and is partially improved to an urban level adjacent to the Project site. East Perrin and East Behymer Avenues are County roads and located adjacent to several of the parcels within the Project Area. East Perrin and East Behymer Avenues both provide access to North Fowler Avenue, which is also a County Road. East Behymer Avenue also extends to North Sunnyside Avenue.

The 445-acre Non-Development Area contains existing rural residential uses and agricultural fields. The Non-Development Area is located within the City of Clovis' Planning Area but is outside of the City's existing SOI. Figure 2.0-4 shows aerial imagery of the existing uses within the Project site.

Existing Surrounding Uses

The Project site is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land, and open space land uses. Uses immediately east of the Project site consist of the Big Dry Creek Reservoir, and an existing earthen dam, owned and operated by the Fresno Metropolitan Flood Control District. Uses immediately south of the Project site are primarily single-family residential. Uses immediately west and north of the Project site are primarily rural residential on larger lots and fallow or grazing properties.

Site Topography

Topographically, the Project site is characterized as flat to gently sloping southerly and westerly, with elevations varying from approximately 385 to 400 feet above mean sea level (amsl). There is a knoll at the northeast corner of the Project area that varies in elevation from 395 to 440 feet amsl.

HAZARDS ASSESSMENT

For the purposes of this EIR, "hazardous material" is defined as provided in California Health & Safety Code, Section 25501:

- Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

"Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment, if released into the workplace or the environment.

"Hazardous waste" is a subset of hazardous materials. For the purposes of this EIR, the definition of hazardous waste is essentially the same as that in the California Health & Safety Code, Section 25517, and in the California Code of Regulations (CCR), Title 22, Section 66261.2:

- Hazardous wastes are wastes that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

CCR Title 22 categorizes hazardous waste into hazard classes according to specific characteristics of ignitibility, corrosivity, reactivity, or toxicity. Hazardous waste with any of these characteristics is also known as a Resource Conservation and Recovery Act (RCRA) waste.

Hazardous materials can be categorized as hazardous non-radioactive chemical materials, radioactive materials, toxic materials, and biohazardous materials. The previous definitions are adequate for non-radioactive hazardous chemicals. Radioactive and biohazardous materials are further defined as follows:

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability.
- Radioactive wastes are radioactive materials that are discarded (including wastes in storage) or abandoned.
- Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute groundwater.
- Biohazardous materials include materials containing certain infectious agents (microorganisms, bacteria, molds, parasites, and viruses) that cause or significantly contribute to increased human mortality or organisms capable of being communicated by invading and multiplying in body tissues.
- Medical wastes include both biohazardous wastes (byproducts of biohazardous materials) and sharps (devices capable of cutting or piercing, such as hypodermic needles, razor blades, and broken glass) resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities.

There are several hazardous materials and hazardous wastes that could be found on any given property based on past uses. Some common examples include agrichemicals (chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides, such as Mecoprop [MCPP], Dinoseb, chlordane, dichloro-diphenyltrichloroethane [DDT], and dichloro-diphenyl-dichloroethylene [DDE]), petroleum-based products (oil, gasoline, diesel fuel), a variety of chemicals including paints, cleaners, and solvents, and asbestos-containing or lead-containing materials (e.g., paint, sealants, pipe solder).

Site Reconnaissance

As part of the Phase I Environmental Site Assessment (ESA) that was completed for the Project site, site reconnaissance was conducted on December 20 and 22, 2022, and on January 13, 2023.[1] A previous Phase I ESA was conducted, which included site reconnaissance on February 16 and 18, 2021.[2] The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions, including hazardous substances and petroleum products, in connection with the property (including soils, surface waters, and groundwater). In addition, a Phase II Limited Subsurface Survey (LSS) was conducted on July 28, 2021.[3] The purpose of the Phase II ESA was to determine impacts related to constituents of potential concern from areas of concern identified in the February 2021 Phase I ESA. The Phase I ESA and Phase II LSS were conducted for the MPArea 1 properties only. A discussion of visual observations and findings is provided below. Complete reports are included in Appendix G of this EIR.

NORTHERN PORTION (APNS 557-031-23 AND 558-010-25)

The northern portion of the subject site was observed to be a fenced grassy pasture. A herd of cattle was observed grazing the pasture at the time of the site reconnaissance. The pasture had one metallic windmill present near the western subject site boundary. An approximately 300-gallon water storage tank was located adjacent to the windmill; however, the piping between the windmill and the storage tank was not connected. An ephemeral tributary was observed extending east to west across the northern portion of the subject site. The tributary, known as Big Dry Creek, was observed as holding water. No evidence of waste or wastewater was observed as discharging into the tributary. No other features were observed in this area.

NORTHERN PORTION (APNS 557-031-24, 557-031-25, 557-031-27 AND 557-031-37)

Other parcels in the northern portion of the subject site were previously observed to be vacant land, with soil piles of unknown origin, as well as an active water well and storage tank. This area also included a rural residence and associated structures, as well as a buried recycled water line, an associated water well and septic system, an abandoned water well, piles of refuse, and remnants of the former agricultural irrigation system and the former channel of Dry Creek. Two rural residences and associated structures, a swimming pool, two water wells and three septic systems were reported by the owner. A small underground storage tank (UST) was reported by the owner to have been installed, but none was observed during the site reconnaissance. Small quantities of gasoline, oil and points were observed in the barns and sheds. Exposed surface soils did not exhibit obvious signs of discoloration. No standing water was observed on the subject site. High-voltage, pole-

[1] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

[2] Krazan & Associates, Inc. Phase I Environmental Site Assessment, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. February 24, 2021.

[3] Krazan & Associates, Inc. Report of Findings, Phase II Limited Subsurface Survey and Soil Pile Sampling, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. August 30, 2021.

mounted electrical transmission lines were not observed. A number of pole-mounted transformers were observed on the subject site. No other features were observed in this area.

SOUTHERN PORTION (APNS 557-012-02, 557-012-28, 557-012-29 AND 557-022-11S)

This portion of the subject site was primarily vacant land, with a pole-mounted transformer, an active water well, an abandoned water well, soil piles of unknown origin, and two rural residences with associated structures were observed. An abandoned water well casing, as well as piles of trash which appeared to be non-hazardous, were observed.

SOUTHERN PORTION (APN 557-031-35)

This portion of the subject site was formerly utilized for poultry (turkey) raising operations. Three approximately 550-foot elongated poultry sheds were observed in the northwestern portion of the parcel. All three sheds were in very poor condition; the southernmost shed had metal roofing and siding; however, the northern two sheds were more severely dilapidated as there were no rooftops or siding, only the deteriorating wooden skeleton of the structures remained. The interiors were observed to be mostly vacant with some abandoned poultry feeding equipment. Regulators, wall-mounted meters, and into-the-ground piping was observed at the eastern end of the poultry sheds. This infrastructure was most likely associated with heating and/or feeding systems used in all poultry sheds.

Several debris piles were observed southwest of the southern poultry shed. The piles in this area were observed to contain waste tires, glass bottles, scrap wood, metal piping, empty rusted drums, empty buckets, concrete irrigation pipes, and wooden pallets among other general refuse. No hazardous materials containers were observed in this area. No areas of soil staining or noxious odors were encountered in this area.

A makeshift pole-barn was observed south of the southern poultry shed. It appeared that this shed had been used by transient persons as a shelter. A concrete pad was observed to the east of the southernmost poultry shed; no staining was present. The past usage of the concrete pad is unknown. No evidence of hazardous materials storage/waste was observed in association with the pole-barn or sheds.

An agricultural well was observed in the northwest corner of the parcel between two of the poultry sheds. The well consisted of a submersible well pump adjacent to a pump box and pressurized water storage tank. An adjacent transformer provided electricity to the system.

Two electricity poles were observed on the eastern border of the parcel, one of which was a pole-mounted transformer. Based on Krazan's observations, the Pacific Gas & Electric (PG&E) Company is the owner of the transformer. The transformer was not labeled as to its non-polychlorinated biphenyl (non-PCB) status. Based on the visual absence of apparent unauthorized releases of insulating fluids from the on-site transformer at the time of Krazan's site reconnaissance, the on-site transformer is not currently anticipated to pose an adverse impact to the subject site. The transformer casing displayed no visual evidence of leakage and the ground surface below the transformer displayed no evidence of discoloration.

Plastic waste, irrigation tubing, and decomposed plastic sheeting was observed in large piles along the western parcel border. The southern half of the parcel was observed to be unharvested rowed crops and neglected tractor equipment attachments scattered in the field area.

During the visual observations of the parcel, no obvious evidence (vent pipes, fill pipes, dispensers, etc.) of USTs were noted within the areas observed.

SOUTHERN PORTION (APN 557-031-44S)

The parcel is described in three areas. The northern portion is primarily undeveloped and former agricultural land, the central portion consists of abandoned sheds, and the southern portion consists of a single-family residence and Contractor's Corp Yard.

The northern portion was formerly utilized as agricultural land. The central portion of the parcel is primarily vacant; however, three abandoned sheds/structures and abandoned agricultural equipment were observed in this area. The sheds/structures were mostly vacant; however, piles of empty agricultural chemical containers and miscellaneous debris and general refuse was observed inside. An approximately 50-foot long by 30-foot-wide concrete pad was observed adjacent to the sheds. A pole mounted transformer was observed adjacent to the east of the sheds along North Temperance Avenue. No evidence was observed that indicated environmental concerns in this area of the parcel.

The southern portion of the parcel is developed with a single-family residence and several sheds on the western half and is occupied by Contractor's Corp Yard on the eastern half. One single-family residence with a detached garage, propane tanks, and an HVAC system was observed adjacent to the north of East Shepherd Avenue. The resident's septic tank was not observed during the reconnaissance; however, it was indicated by the property owner in the environmental questionnaire. North of the residence are two sheds and two additional poultry sheds; however, access was not provided to the interior of the two sheds.

An above ground storage tank (AST) was observed in this area near the northern of the two sheds. No evidence of a release was observed on or beneath the AST and no secondary containment was observed beneath the stand-mounted AST. Adjacent to the AST, a vent pipe and what appeared to be a hand pump attached to a dispenser pipe, common indicators of an underground storage tank, were observed. The area's housekeeping was observed to be poor. Miscellaneous objects and debris, including a canoe, refrigerator, desktop computer, and a pile of scrap metal were observed surrounding the northern shed. The potential presence of an UST represents a recognized environmental concern (REC) to this assessment.

Landscaping Connection, Inc. occupies an approximately 5.25 square-acre area of the southeastern portion of the parcel. At the center of the business yard, a mobile structure for the landscaping company's business office was observed. There were no issues or environmental concerns within the office building. Approximately 120 feet east of the office building was a vehicle maintenance and workshop shed. Several drums of used motor oil and buckets of tractor fluid were observed in this area. The drums were not observed to be placed on secondary containment. De minimus

staining was observed beneath the drums and buckets; however, other areas of heavier staining were observed within the repair shop. At the time of the reconnaissance, heavy staining was observed beneath a truck within the maintenance shop. The heavy staining appeared to be covered with an absorbent material. In addition, housekeeping in this area was poor. A second AST was observed adjacent to the exterior of the vehicle maintenance and workshop shed. The AST was approximately 150-gallon capacity and observed to be stored within a secondary containment unit and on wooden slats above the ground surface. De minimus staining was observed on the AST and containment unit on the ground surface beneath the containment.

The remainder and perimeter of the landscaping yard was observed to consist mostly of large piles of green waste, wood chips, gravel, boulders, landscaping blocks, irrigation piping, and miscellaneous landscaping equipment. A stormwater retention basin was observed in the southwestern corner of the landscaping yard. No evidence of staining and no odors were noted in the area of the basin. Ms. Brown was unaware of any drainage to the basin from any of the operations.

SOUTHERN PORTION (APN 557-031-05S)

The easternmost parcel in the southern portion of the subject site was observed to be undeveloped in the northern portion and agricultural in the southern portion. A large debris pile of broken concrete, plastic potting containers, and wooden posts was observed in the northern portion. An approximately four-acre sago palm farm was observed in the southern portion of the parcel. Two seatrain storage containers, a mobile office building, and four semi-truck trailers were observed along the eastern side of North Temperance Avenue. A water pump and pole-mounted transformer were observed adjacent to the seatrains. There were minor housekeeping issues adjacent to the trailer area, including numerous black plastic buckets and wooden pallets observed to be discarded in piles across the area.

Site Usage Survey

A review of historical Sanborn Fire Insurance Maps (SFIMs), historic USGS topographic maps, City of Clovis Planning and Development Department (CCPDD) and Fresno County Public Works and Development Department (FCPWDD) records, reasonably ascertainable City cross-reference directories, historical aerial photographs, local agency records and previous environmental reports, as made available to Krazan, were utilized to assess the history of the subject site.[4,5]

[4] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

[5] Krazan & Associates, Inc. Phase I Environmental Site Assessment, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. February 24, 2021.

AERIAL PHOTOGRAPH INTERPRETATION

Historical aerial photographs from 1937through 2020 were obtained from Environmental Data Resources, Inc. (EDR) and reviewed to assess the history of the subject site. The subject site was in different stages of agricultural use and fallow land from at least 1937 to the present and has been developed with the existing residential dwellings from at least the late 1930s. Poultry sheds were depicted from at least 1957 to the present. The adjacent properties consist primarily of undeveloped land and minor agricultural use and remained relatively unchanged until 2005 when residential developments were constructed south of East Shepherd Avenue. A discussion of the aerial photograph interpretation is provided below.

- 1937, 1946: The southern portion of the subject site is occupied by rural residences and utilized for agricultural purposes including row crops. A barn and two smaller structures are depicted near the residence. The northern portion of the subject site is undeveloped herbaceous grassland. Dry Creek and a stream wash meanders in an easterly to westerly direction. Surrounding properties are a mix of agriculture, rural residential and a stream channel and wash bed.
- 1946: The site is relatively unchanged from the 1937 aerial photograph, except the barn is no longer visible and one elongated shed, likely a poultry shed is visible between the residence and the two smaller structures. A second residence was visible. Adjacent properties are relatively unchanged from the conditions in the 1937 aerial photograph.
- 1950: The site is relatively unchanged from the 1946 aerial photograph, except at least three new structures are visible north of the residence. The main residence and associated structure on APN 557-012-029 are no longer visible. A road and the Dry Creek canal and levee were constructed to the northeast of the site.
- 1957: The site is relatively unchanged from the 1950 aerial photograph, except that agricultural patterns have changed and a small ponding is visible in the northwest, while several elongated structures have been constructed in the southwestern portion of the subject site. The structures were identified as poultry sheds during the site reconnaissance. Adjacent properties were relatively unchanged from the 1950 aerial photograph, except that there is more visible vegetation in the marsh/wetland area to the northeast of the subject site and additional agricultural crops on the property to the northwest of the subject site.
- 1962: The site is relatively unchanged from the 1957 aerial photograph, except that additional elongated structures have been constructed on the site. Adjacent properties are relatively unchanged from the 1957 aerial photograph. Additional structures associated with the off-site chicken farm southeast of the subject site are visible. New off-site rural residences are visible.
- 1967: The site is relatively unchanged from the 1957 aerial photograph, except that an additional elongated poultry shed was added to the northwest corner of the lower southwestern portion of the subject site, as well as the addition of visible poultry barriers/corrals around the sheds. Adjacent properties are relatively unchanged from the 1962 aerial photograph. Additional structures associated with the off-site chicken farm southeast of the subject site are visible. New off-site rural residences are visible.

- 1973, 1979, 1981, 1984, 1987: The site is relatively unchanged from the 1967 aerial photograph, except that a second additional large, elongated poultry shed that was constructed adjacent to the previously mentioned shed addition in 1967. New off-site rural residences and a swimming pool are visible. Adjacent properties are relatively unchanged from previous years' aerial photographs.
- 1998: The site is relatively unchanged from the 1987 aerial photograph, except that there appears to be additional rowed crops cultivated on the southwestern portion of the subject site. The residence at 5931 E. Perrin Avenue is visible. The north portion of the subject site (APN 557-031-23 and APN 558-010-25) is relatively unchanged. Adjacent properties are relatively unchanged from the 1987 aerial photograph.
- 2005, 2009: The site is relatively unchanged from the 1998 aerial, except that there to be an additional structure and landscaping on APN 557-031-44S in the eastern area of the south portion of the subject site. This structure was identified as the office building of Contractor's Corp Yard, a landscaping business occupying the property during the site reconnaissance. What appears to be landscape debris is visible in the central portion of the subject site. Adjacent properties are relatively unchanged from the 1998 aerial photograph, except that dense, suburban, residential neighborhoods have been constructed south of East Shepherd Avenue.
- 2012: The site is relatively unchanged from the 2009 aerial photograph, except for the destruction, removal, or decomposition of two elongated poultry sheds. Adjacent properties are relatively unchanged from the 2009 aerial photograph.
- 2016, 2020: The site is relatively unchanged from the 2012 aerial photograph, except that two of the larger, elongated poultry sheds in the northwest corner of the south portion of the subject site appear to have been decommissioned and structurally decomposing. Adjacent properties are relatively unchanged from the 2012 aerial photograph.

SANBORN FIRE INSURANCE MAPS

SFIMs were reviewed to evaluate prior land use of the subject site and the adjacent properties. SFIMs typically exist for cities with populations of 2,000 of more, with coverage dependent on the location of the subject site within City limits. EDR was contacted to provide copies of available SFIMs for the site and adjacent properties as far back as 1867, and there was no coverage for the subject site or adjacent properties.[6, 7]

[6] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

[7] Krazan & Associates, Inc. Phase I Environmental Site Assessment, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. February 24, 2021.

USGS TOPOGRAPHIC QUADRANGLE MAP

The 7.5-minute Clovis (1922, 1923, 1946, 1947, 1964, 1972, 1981, 2000, 2012, 2015, and 2018) and the 7.5-minute Friant (1922, 1946, 1947, 1964, 2000, 2012, 2015, and 2018), California, topographic quadrangle maps were reviewed. The subject stie remained mostly undeveloped with few single structures, until the addition of multiple large poultry sheds by 1964 and 1972. The adjacent properties consisted of rural residential and agricultural uses. An engineered levee was constructed to the northeast of the site by 1964, creating Dry Creek, an intermittent lake.[8]

MUNICIPAL RECORDS

On January 3, 2023, a request for building permit records for the site was submitted via the County of Fresno Public Works and Planning Department (CFPWPD) online portal, using the corresponding 6374 East Shepherd Avenue address. CFPWPD responded to the building permit records request and provided records containing permits, dated between 1963 and 2010. According to documents received, the property was permitted a turkey shed rewire in 1963, several agricultural electric services in the late 1960s and 1970s, and additional turkey sheds and agricultural services in 1988 and 2010. Additionally, in 2010, Contractor's Corp Yard was permitted to construct their mobile office, as well as the associated septic and leach field systems.[9]

AGRICULTURAL CHEMICALS

Review of historical aerial photographs indicates that the northern portion of the site has been undeveloped since 1937. The southern portion of the site was utilized for agricultural production from at least 1937, a poultry farm since at least the 1960s and a commercial landscaping facility from the 2000s to the present. It is not known if environmentally persistent pesticides/herbicides were historically applied to the agricultural areas of the southern portion of the subject site; however, according to the environmental questionnaire completed by Mr. Ron Maikovich, property owner for 70 years, no agricultural chemicals (pesticides/herbicides) have been stored, applied, mixed or formulated on the subject site, and persistent pesticides/herbicides, such as DDT, have not been used at the property, to his knowledge.

Numerous empty 55-gallon drums of Gluphosphate (herbicide) and RoundUp Pro Max were observed on Contractor's Corp Yard's exterior storage yard. It is unknown whether these were used on-site or whether they were used off-site, as part of Contractor's Corp Yard's services at customers' locations. No other evidence of the storage or on-site usage of pesticides/herbicides was observed during the site assessment. Based on the former usage of a portion of the subject site as a poultry farm, and the relatively small acreage allotted to agriculture, the potential for elevated

[8] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

[9] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

concentrations of environmentally persistent pesticides/herbicides to currently exist in the near surface soils of the subject site appears to be low.[10, 11]

INTERVIEWS

Interviews were conducted with the owners of the subject site, a key site manager, subject site occupant(s), and/or the previous owner/occupant(s) of the subject site. The interview(s) is/are designed to provide pertinent information regarding potential environmental impacts associated with the site.[12, 13] Interviews were conducted with property owners and/or employees, and to the best of their knowledge, no disposal of hazardous materials, no existing or former USTs, no hazardous materials spills, no buried materials, no monitoring or irrigation wells, no environmental liens, and no other items of environmental concern are associated with the subject site. It was indicated that there is a water well and storage tank near a windmill. It was also stated that there is one septic system associated with the residence and four water wells on these parcels of subject site. In addition, there was knowledge of a current on-site UST and one dry well, but the location of the dry well was not indicated.

American Society for Testing Materials (ASTM) Non-Scope Considerations

According to ASTM, there may be environmental issues or conditions at assessed properties that are outside the scope of the Phase I ESA practice (non-scope considerations). Some substances may be present in quantities and under conditions that may lead to contamination of assessed or of nearby properties but are not included in the Comprehensive Environmental Resource, Compensation, and Liability Act of 1980 (CERCLA) definition of hazardous substances. ASTM non-scope considerations appropriate for the subject site are discussed below.[14]

ASBESTOS-CONTAINING MATERIALS

Asbestos is a group of naturally occurring mineral fibers that have been used commonly in a variety of building construction materials for insulation and as a fire-retardant. Because of its fiber strength and heat resistant properties, asbestos has been used for a wide range of manufactured goods,

[10] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

[11] Krazan & Associates, Inc. Phase I Environmental Site Assessment, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. February 24, 2021.

[12] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

[13] Krazan & Associates, Inc. Phase I Environmental Site Assessment, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. February 24, 2021.

[14] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

mostly in building materials, vehicle brakes, and heat-resistant fabrics, packaging, gaskets, and coatings. When asbestos-containing materials (ACMs) are damaged or disturbed by repair, remodeling, or demolition activities, microscopic asbestos fibers may become airborne and can be inhaled into the lungs, where they can cause significant health problems. The residential dwellings located on the subject site were constructed prior to 1978. It is unknown if the on-site dwellings contain ACMs. An asbestos survey and sampling of the on-site dwellings was not included within the scope of this assessment; however, based on the date of construction, ACMs may be present at the subject site.

LEAD-BASED PAINT

Although lead-based paint (LBP) was banned in 1978, many buildings constructed prior to 1978 have paint that contains lead. Lead from paint, chips, and dust can pose serious health hazards if not addressed properly. The structures located on the subject site appear to have been constructed prior to 1978. It is unknown if the on-site structures contain LBP. An LBP survey and sampling of the on-site dwelling and structures was not included within the scope of this assessment; however, based on the date of construction, LBP may be present at the subject site.

MOLD

A class of fungi, molds have been found to cause a variety of health problems in humans, including allergic, toxicological, and infectious responses. Molds are decomposers of organic materials, and thrive in humid environments, and produce spores to reproduce, just as plants produce seeds. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on to survive. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed. As such, interior areas of buildings characterized by poor ventilation and high humidity are the most common locations of mold growth. Building materials including drywall, wallpaper, baseboards, wood framing, insulation and carpeting often play host to such growth. Moisture control is the key to mold control. Molds need both food and water to survive; since molds can digest most things, water is the factor that limits mold growth. Due to the inaccessibility to the interior of the existing residence, it is unknown whether significant interior mold or on-going water intrusion is present within the residence.

RADON

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. A radon survey was not included within the scope of this investigation; however, the State of California Department of Public Health (CDPH) maintains a statewide database of radon results in designated geographic areas. Radon detection devices are placed in homes throughout the study region to determine geographic regions with elevated radon concentrations. The U.S. Environmental Protection Agency (EPA) has set the safety standard for radon gas in homes to be 4.0 pico Curies per liter (pCi/L).

The U.S. EPA has prepared a map to assist national, state, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, Zone 1 being those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action Limit of 4.0 pCi/L. It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the EPA recommends site-specific testing to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. Review of the EPA Map of Radon Zones places the Property in Zone 2, where average predicted radon levels are between 2.0 and 4.0 pCi/L. Therefore, the available data suggests that the potential for radon to adversely impact the subject site appears to be low.

Phase II Limited Subsurface Survey

The Phase II LSS and soil pile sampling at the Shepherd North Residential Properties, located on the north side of Sheherd Avenue at Temperance Avenue, in Clovis, was conducted after the February 2021 Phase I ESA. With the purpose of determining the presence or absence of impacts from constituents of potential concern related to the end dump soil piles along the southern site boundary and southwestern portion of the subject site and the possible presence of a UST associated with the former rural residence on the site, soil samples were collected and tested. The LSS detected one ferrous metallic object measuring approximately eight feet by eight feet, producing an image of a UST, located at a depth of approximately 1.5 feet below ground surface. Soil sampling results for chemicals, metals and arsenic were all either not detected or below concentrations for respective residential levels or within the accepted background levels for California. As such, there was no evidence of constituents of concern in the soil exceeding regulatory screening levels, and soils may remain in place. However, it was recommended that the discovered UST be removed in accordance with local, state and federal regulations.[15]

Regulatory Agency Records

A review of regulatory agency records was conducted to help determine if hazardous materials have been handled, stored, or generated on the Development Area and/or the adjacent properties and businesses. A review of federal and state regulatory databases was conducted to help determine if hazardous materials have been handled, stored, or generated on the subject site and/or the adjacent properties and businesses. The federal and state environmental databases consulted during this assessment were compiled by EDR and identified facilities within the search distances specified in ASTM 1527-13. Krazan verified the location and distances of the properties Krazan deemed as having the potential to adversely impact the subject site. The actual location of the listed properties may differ from the EDR listing. No EDR-listed unmapped (non-geocoded) sites identified

[15] Krazan & Associates, Inc. Report of Findings, Phase II Limited Subsurface Survey and Soil Pile Sampling, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. August 30, 2021.

were determined to be located on or adjacent to the subject site.[16] Regulatory records are reviewed based on the following criteria:

1) properties with known soils and/or groundwater releases considered to represent the potential for impact to the Development Area that are located within 1,760 feet of the Development Area for constituents of concern impacts or 528 feet of the Development Area for petroleum hydrocarbon impacts;
2) properties that are adjacent or in proximity to the Development Area included within the EDR regulatory database report or noted during the site reconnaissance to possibly handle, store, or generate hazardous materials.

NATIONAL PRIORITIES LIST

No federal Superfund – National Priorities List (NPL) sites were determined to be located within a one-mile radius of the subject site.

STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – GEOTRACKER

The review of the State of California Regional Water Quality Control Board (RWQCB) GeoTracker database available via the RWQCB Internet Website indicated that no sites including leaking underground storage tank (LUST) sites, cleanup program sites, land disposal sites, or military sites are listed for the Development Area, the adjacent properties, or properties located within the Development Area vicinity. Additionally, no permitted UST sites were determined to be located on or adjacent to the Development Area.[17]

STATE OF CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL – ENVIROSTOR

The review of the State of California Department of Toxic Substances Control (DTSC) EnviroStor database available via the DTSC's Internet Website indicated that no sites including State response sites, voluntary cleanup sites, school cleanup sites, or military or school evaluation sites are listed for the Development Area, the adjacent properties, or properties located within 1,000 feet of the Development Area. Additionally, no Federal Superfund – National Priorities List (NPL) sites were determined to be located within a one-mile radius of the Development Area.[18]

[16] Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues, (APN 557-031-023, 558-010-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

[17] State Water Resources Control Board, GeoTracker, Data Search. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=clovis. Accessed February 2024.

[18] California Department of Toxic Substances Control, EnviroStor, Data Search. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=clovis%2C+ca. Accessed February 2024.

CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES - DOMS

The review of the State of California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) Well Finder online mapping system indicated that no plugged and abandoned or producing oil wells are located on or adjacent to the Development Area.[19]

FRESNO COUNTY DEPARTMENT OF COMMUNITY HEALTH, ENVIRONMENTAL HEALTH SYSTEM

The Fresno County Department of Community Health, Environmental Health System (FCEHS) is the lead regulatory agency, or Certified Unified Program Agency (CUPA), for hazardous materials handling facilities in Fresno County. The review of the FCEHS CUPA and Solid Waste Programs Resource List (CUPA List) dated June 6, 2021, indicated that no records are on file with the FCEHS for the Development Area. However, records are on file with the FCEHS for adjacent and vicinity properties which do not represent material evidence of the potential to represent environmental concern to the Development Area.[20]

CITY OF CLOVIS FIRE DEPARTMENT

The City of Clovis Fire Department (CCFD) will have jurisdiction for the fire protection for the Development Area and the immediate vicinity. According to representatives of the CCFD, records of hazardous materials incidents are kept by the FCEHS. Additionally, hazardous/flammable incidents are filed according to the date of occurrence and by the location of occurrence with the FCEHS.

LOCAL AREA TRIBAL RECORDS

No Indian reservations, USTs on Indian land, or LUSTs on Indian land were reported on the Development Area, adjacent properties, or vicinity properties.

HAZARDOUS MATERIALS MIGRATION IN VAPOR

Hazardous materials or petroleum product vapors which may have the potential to migrate into the subsurface of the Development Area may be caused by the release of vapors from contaminated soil or groundwater either on or in the vicinity of the Development Area from current or historical uses of the Development Area and/or adjacent or vicinity properties. Current or past land uses such as gasoline stations (using petroleum hydrocarbons), dry cleaning establishments (using chlorinated volatile organic compounds), former manufactured gas plant sites (using volatile and semi-volatile organic compounds), and former industrial sites, such as those that had vapor degreasing or other parts-cleaning operations (using chlorinated volatile organic compounds) are of particular concern.

[19] California Department of Conservation, Division of Oil, Gas and Geothermal Resources, DOC Maps: Geologic Energy Management Division, Data Viewer, Well Finder, Data Search. Available at: https://maps.conservation.ca.gov/doggr/#webmaps. Accessed February 2024.

[20] Fresno County Department of Public Health, CUPA Solid Waste Resource List. 2021. Available at: https://www.fresnocountyca.gov/files/assets/county/public-health/environmental-health/cupa-solid-waste-resource-list-6-8-2021.xlsx. Accessed February 2024.

Constituent of concern vapors can migrate great distances omni-directionally along subsurface conduits such as pipelines, utility lines, sewer, and stormwater lines, and building foundations.

Based on the review of regulatory database searches, including GeoTracker, EnviroStor and the DOGGR Well Finder databases, no listings of concern were determined to be associated with the Development Area, adjacent properties, or properties located within the Development Area vicinity. Review of vicinity properties listed by EDR as release sites within the applicable search radii suggests that these properties do not represent a significant potential for vapor migration in connection to the subject site. No engineering control sites, sites with institutional controls, or sites with deed restrictions were listed for the subject site, adjacent sites, or vicinity properties in the EDR Report.

Transportation of Hazardous Materials

The transportation of hazardous materials within the City of Clovis Planning Area is subject to various federal, State, and local regulations. The following provisions are included in the California Vehicle Code and pertain to the transportation of hazardous related materials.[21,22]

- The California Highway Patrol designates the routes in California which are to be used for the transportation of explosives. (Section 31616)
- The California Vehicle Code applies when the explosives are transported as a delivery service for hire or in quantities in excess of 1,000 pounds. The transportation of explosives in quantities of 1,000 pounds or less, or other than on a public highway, is subject to the California Health and Safety Code. (Section 31601(a))
- It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery of, or the loading of, such materials. (Section 31602(b) and Section 32104(a))
- When transporting explosives through or into a city for which a route has not been designated by the Highway Patrol, drivers must follow routes as may be prescribed or established by local authorities. (Section 31614(a))

Inhalation hazards and poison gases are subject to additional safeguards. These materials are highly toxic, spread rapidly, and require rapid and widespread evacuation if there is loss of containment or a fire. The Highway Patrol designates through routes to be used for the transportation of inhalation hazards. It may also designate separate through routes for the transportation of inhalation hazards composed of any chemical rocket propellant. (Section 32100 and Section 32102(b))

[21] California Legislative Information, California Vehicle Code, Division 14 – Transportation of Explosives [Section 31600–31620]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=VEH&division=14.&title=&part=&chapter=&article=. Accessed February 2024.

[22] California Legislative Information, California Vehicle Code, Division 14.3 – Transportation of Inhalation Hazards [32100-32109]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=VEH&division=14.3.&title=&part=&chapter=&article=. Accessed February 2024.

FIRE HAZARDS

Wild fires are a major hazard in the State of California. Wild fires burn natural vegetation on developed and undeveloped lands and include timber, brush, woodland, and grass fires. While low intensity wild fires have a role in the County's ecosystem, wild fires put human health and safety, structures (e.g., homes, schools, businesses, etc.), air quality, recreation areas, water quality, wildlife habitat and ecosystem health, and forest resources at risk.

Wildland fire hazards exist in varying degrees in the foothills of the Sierra Nevada Mountains, located to the east of the Project site. The Project site is in the valley floor, which is predominantly under agricultural or urban use, which is typically considered an area with a low fire hazard risk.

Fire Hazard Severity Zones

The state has charged the California Department of Forestry and Fire Protection (CalFire) with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas. In addition, CalFire must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards.

LOCAL RESPONSIBILITY AREAS

The Project site is located within a Local Responsibility Area (LRA). The Project site is not categorized as a VHFHSZ by CalFire.

STATE RESPONSIBILITY AREAS

While the Project site is not in a State Responsibility Area (SRA), the eastern edge of the Project site, bordered by North Carson Avenue, is designated by CalFire as a moderate fire hazard severity zone and in a SRA.[23]

FEDERAL RESPONSIBILITY AREAS

There are no Federal Responsibility Areas (FRAs) within the vicinity of the Project site.

[23] California Department of Forestry and Fire Protection, Fire Hazard Severity Zones in State Responsibility Areas, September 29, 2023. Data Search. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed February 2024.

3.8.2 REGULATORY SETTING

FEDERAL

Aviation Act of 1958

The Federal Aviation Act resulted in the creation of the Federal Aviation Administration (FAA). The FAA is charged with the creation and maintenance of a National Airspace System.[24]

Federal Aviation Regulations (Code of Federal Regulations Title 14)

The Federal Aviation Regulation (FAR) establishes regulations related to aircraft, aeronautics, and inspection and permitting.[25]

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.[26]

Clean Water Act

The Clean Water Act (CWA), which amended the Water Pollution Control Act (WPCA) of 1972, sets forth the Section 404 program to regulate the discharge of dredged and fill material into Waters of the U.S. and the Section 402 National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants into Waters of the U.S. The Section 401 Water Quality Certification program establishes a framework of water quality protection for activities requiring a variety of Federal permits and approvals (including CWA Section 404, CWA Section 402, FERC Hydropower and Section 10 Rivers and Harbors).[27]

Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous material releases.

[24] The Federal Aviation Act of 1958, Public Law 85-726, August 23, 1958. Available at: https://www.govinfo.gov/content/pkg/STATUTE-72/pdf/STATUTE-72-Pg731.pdf. Accessed February 2024.

[25] Code of Federal Regulations, Title 14, Federal Aviation Regulations. Available at: https://www.ecfr.gov/current/title-14. Accessed February 2024.

[26] U.S. Environmental Protection Agency, Clean Air Act Overview, Clean Air Act Text. Available at: https://www.epa.gov/clean-air-act-overview/clean-air-act-text#toc. Accessed February 2024.

[27] U.S. Environmental Protection Agency, Laws & Regulations, Summary of the Clean Water Act, 33 USC Section 1251 et seq. (1972). Available at: https://www.epa.gov/laws-regulations/summary-clean-water-act. Accessed February 2024.

CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.[28]

Environmental Protection Agency

The primary regulator of hazards and hazardous materials is the U.S. EPA, whose mission is to protect human health and the environment. The City of Clovis is located within EPA Region 9, which includes Arizona, California, Hawaii, Nevada, the Pacific Islands and 148 tribal nations.[29]

FY 2001 Appropriations Act

Title IV of the Appropriations Act required the identification of "Urban Wildland Interface Communities in the Vicinity of Federal Lands that are at High Risk from Wildfire" by the U.S. Departments of the Interior and Agriculture.[30]

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the basic statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the U.S. Department of Transportation (USDOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials.[31]

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases, as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of

[28] U.S. Environmental Protection Agency, Superfund, Superfund: CERCLA Overview. Available at: https://www.epa.gov/superfund/superfund-cercla-overview#:~:text=The%20Comprehensive%20Environmental%20Response%2C%20Compensation%2C%20and%20Liability%20Act%20of%201980,waste%20at%20these%20sites%3B%20and. Accessed February 2024.

[29] U.S. Environmental Protection Agency, About EPA, EPA Region 9 (Pacific Southwest). Available at: https://www.epa.gov/aboutepa/epa-region-9-pacific-southwest. Accessed February 2024.

[30] U.S. Environmental Protection Agency, National Service Center for Environmental Publications (NSCEP), Fiscal Year 2001 Annual Report. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/50000UQM.PDF?Dockey=50000UQM.PDF. Accessed February 2024.

[31] U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Federal Hazmat Law, An Overview of Federal Laws for Hazardous Materials Transportation. Available at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-09/Hazmat%20Law%20Overview_September-2021_0.pdf. Accessed February 2024.

pipeline facilities. While the federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for state assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum federal regulations and may adopt additional or more stringent regulations, if they are not incompatible.[32]

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program established tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. The RCRA was further amended in 1988 to set additional standards for USTs.

In July 2015, the EPA revised the federal UST regulation, which strengthened the 1988 federal UST regulations by increasing emphasis on properly operating and maintaining UST equipment. The revision added new operation and maintenance requirements and addressed UST systems deferred in the 1988 UST regulation. The purpose of the revision was to help prevent and detect UST releases, which are a leading source of groundwater contamination. To ensure compliance performance measures reflect the 2015 UST regulation, the EPA and the Association of State and Territorial Solid Waste Management Officials coordinated to update existing compliance performance measures and add new measures. The measures required states to switch from tracking compliance against significant operational compliance measures to the more stringent technical compliance rate (TCR) measures. As of September 2023, 58 percent of USTs were in compliance with all TCR categories.[33]

STATE

Aeronautics Act (Public Utilities Code Section 21001)

The California Department of Transportation (Caltrans) Division of Aeronautics bases most of its aviation policies on the Aeronautics Act. Policies include permits and annual inspections for public

[32] U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Natural Gas Pipeline Safety Act of 1968. Available at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/Natural%20Gas%20Pipeline%20Safety%20Act%20of%201968.pdf. Accessed February 2024.

[33] U.S. Environmental Protection Agency, Semiannual Report of UST Performance Measures, End of Fiscal Year 2023 (October 01, 2022 – September 30, 2023). Available at: https://www.epa.gov/system/files/documents/2023-11/fy-23-eoy-final-report-11-21-2023.pdf. Accessed February 2024.

airports and hospital heliports and recommendations for schools proposed within two miles of airport runways.[34]

Airport Land Use Commission Law (Public Utilities Code Section 21670 et seq.)

The Airport Land Use Commission Law, passed in 1967, authorized the creation of Airport Land Use Commissions (ALUC) in California. Per the Public Utilities Code, the purpose of an ALUC is to protect *public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses* (Public Utility Code Section 21670). Furthermore, each ALUC must prepare an Airport Land Use Compatibility Plan (ALUCP). Each ALUCP, which must be based on a twenty-year planning horizon, should focus on broadly defined noise and safety impacts.

Assembly Bill 337

Per Assembly Bill (AB) 337, local fire prevention authorities and CalFire are required to identify VHFHSZs in LRAs. Standards related to brush clearance and the use of fire-resistant materials in fire hazard severity zones are also established.[35]

California Code of Regulations

Title 3 of the California Code of Regulations (CCR) pertains to the application of pesticides and related chemicals. Parties applying regulated substances must continuously evaluate application equipment, the weather, the treated lands, and all surrounding properties.[36] Title 3 prohibits any application that would:

- Contaminate persons not involved in the application;
- Damage non-target crops or animals or any other public or private property; and
- Contaminate public or private property or create health hazards on said property.

Title 8 of the CCR establishes California Occupational Safety and Health Administration (Cal OSHA) requirements related to public and worker protection. Topics addressed in Title 8 include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident

[34] California Department of Transportation, Division of Aeronautics, California Public Utilities Code, Section 21001 et seq. relating to the State Aeronautics Act, March 2019. Available at: https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/puc_ssa_r3_2019.pdf. Accessed February 2024.

[35] California Department of Forestry and Fire Protection, Frequently Asked Questions About 2020 Fire Hazard Severity Zones. Available at: https://bof.fire.ca.gov/media/ttpi3n3m/full-14-b-vhfhsz-frequently-asked-questions.pdf. Accessed February 2024.

[36] California Department of Pesticide Regulation. California Code of Regulations (Title 3, Food and Agriculture), Division 6. Pesticides and Pest Control Operations. Available at: https://www.cdpr.ca.gov/docs/legbills/calcode/chapter_.htm. Accessed February 2024.

prevention. Construction safety and exposure standards for lead and asbestos are set forth in Title 8.[37]

Title 14 of the CCR establishes minimum standards for solid waste handling and disposal.[38]

Title 17 of the CCR establishes regulations relating to the use and disturbance of materials containing naturally occurring asbestos.[39]

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.[40]

Title 22 of the CCR sets forth definitions of hazardous waste and special waste. The section also identifies hazardous waste criteria and establishes regulations pertaining to the storage, transport, and disposal of hazardous waste.[41]

Title 26 of the CCR is a medley of state regulations pertaining to hazardous materials and waste that are presented in other regulatory sections. Title 26 mandates specific management criteria related to hazardous materials identification, packaging, and disposal. In addition, Title 26 establishes requirements for hazardous materials transport, containment, treatment, and disposal. Finally, staff training standards are set forth in Title 26.[42]

Title 27 of the CCR sets forth a variety of regulations relating to the construction, operation, and maintenance of the state's landfills. The title establishes a landfill classification system and categories of waste. Each class of landfill is constructed to contain specific types of waste (household, inert, special, and hazardous).[43]

[37] California Department of Industrial Relations, Cal/OSHA – Title 8 Regulations – Table of Contents. Available at: https://www.dir.ca.gov/samples/search/query.htm. Accessed February 2024.

[38] CalRecycle, Title 14, Natural Resources – Division 7. Available at: https://calrecycle.ca.gov/laws/regulations/title14. Accessed February 2024.

[39] California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification, and Work Practices for Lead-Based Paing and Lead Hazards. Available at: https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/CDPH%20Document%20Library/Title%2017.pdf. Accessed February 2024.

[40] California Code of Regulations, Title 19 – Public Safety, Division 1 – State Fire Marshal. Available at: https://regulations.justia.com/states/california/title-19/division-1/. Accessed February 2024.

[41] California Department of Health Care Services, California Code of Regulations (CCR), Title 22. Available at: https://www.dhcs.ca.gov/services/adp/Pages/CA_Code_Regulations.shtml.aspx. Accessed February 2024.

[42] California Code of Regulations, Title 26 – Toxics. Available at: https://regulations.justia.com/states/california/title-26/. Accessed February 2024.

[43] CalRecycle, Title 27, Environmental Protection – Division 2, Solid Waste. Available at: https://calrecycle.ca.gov/laws/regulations/title27/. Accessed February 2024.

California Government Code Section 65302

California Government Code Section 65302, which establishes standards for developing and updating General Plans, includes fire hazard assessment and Safety Element content requirements.[44]

California Health and Safety Code

Division 11 of the Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).[45]

Division 12 establishes the state fire regulations, are set forth in Section 13000 et seq. of the California Health and Safety Code, which is divided into "Fires and Fire Protection" and "Buildings Used by the Public." The regulations provide for the enforcement of the Uniform Building Code and mandate the abatement of fire hazards. California Health and Safety Code Section 13000 et seq. establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.[46]

Division 12.5 establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and postsecondary buildings.[47]

Division 20 establishes DTSC authority and sets forth hazardous waste and underground storage tank regulations. In addition, the division creates a state superfund framework that mirrors the Federal program.[48]

---

[44]California Government Code, Title 7. Planning and Land Use, Division 1. Planning and Zoning, Chapter 3. Local Planning, Article 5. Authority for and Scope of General Plans [65300 – 65303.4]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=7.&part=&chapter=3.&article=5. Accessed February 2024.

[45] California Health and Safety Code, Division 11, Explosives [12000 – 12761]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=11.&title=&part=&chapter=&article=&nodetreepath=19. Accessed February 2024.

[46] California Health and Safety Code, Division 12, Fires and Fire Protection [13000 – 14959]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=12.&title=&part=&chapter=&article=&nodetreepath=20. Accessed February 2024.

[47] California Health and Safety Code, Division 12.5, Buildings Used by the Public [16000 – 16604]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=12.5.&title=&part=&chapter=&article=. Accessed February 2024.

[48] California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control [25100 – 25259]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=20.&title=&part=&chapter=6.5.&article=. Accessed February 2024.

Division 26 establishes California Air Resources Board (CARB) authority. The division designates CARB as the air pollution control agency per Federal regulations and charges the Board with meeting FCAA requirements.[49]

California Vehicle Code Section 31600 (Transportation of Explosives)

California Vehicle Code Section 31600 establishes requirements related to the transportation of explosives in quantities greater than 1,000 pounds, including licensing and route identification.[50]

California Public Resources Code

The state's Fire Safety Regulations are set forth in Public Resources Code Section 4290, which include the establishment of SRAs.[51] Public Resources Code Section 4291 sets forth defensible space requirements, which are applicable to anyone who "*…owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material*".[52]

Food and Agriculture Code

Division 6 of the California Food and Agriculture Code (FAC) establishes pesticide application regulations. Division 6 establishes training standards for pilots conducting aerial applications, as well as permitting and certification requirements.[53]

State Oversight of Hazards and Hazardous Materials

The DTSC is chiefly responsible for regulating the handling, use, and disposal of toxic materials. The State Water Resources Control Board (SWRCB) regulates discharge of potentially hazardous materials to waterways and aquifers and administers the basin plans for groundwater resources in

[49] California Health and Safety Code, Division 26, Air Resources [39000 – 44475.3]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=26.&title=&part=&chapter=&article=&nodetreepath=32. Accessed February 2024.

[50] California Highway Patrol, HPH 84.3, Explosive Materials Shipments: Routes, Safe Stopping Places, and Safe Parking Places. Revised May 2021. California Vehicle Code, Division 14, Transportation of Explosives. Available at: https://www.chp.ca.gov/CommercialVehicleSectionSite/Documents/HPH_84_3_rev0521.pdf. Accessed February 2024.

[51] California Public Resources Code, Division 4. Forests, Forestry and Range and Forage Lands, Part 2. Protection of Forest, Range and Forage Lands, Chapter 2. Hazardous Fire Areas [4251 – 4290.5]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=2.&article=. Accessed February 2024.

[52] California Public Resources Code, Division 4. Forests, Forestry and Range and Forage Lands, Part 2. Protection of Forest, Range and Forage Lands, Chapter 3. Mountainous, Forest-, Brush- and Grass-Covered Lands (4291 – 4299]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=3.&article=. Accessed February 2024.

[53] California Food and Agriculture Code, Division 6. Pest Control Operations. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=FAC&division=6.&title=&part=&chapter=&article=&nodetreepath=7. Accessed February 2024.

the various regions of the state. The RWQCB oversees surface and groundwater. Programs intended to protect workers from exposure to hazardous materials and from accidental upset are covered under OSHA at the U.S. and Cal OSHA and the California Department of Health Services (DHS) at the state level. Air quality is regulated through the CARB and San Joaquin Valley Air Pollution Control District. The State Fire Marshal is responsible for the protection of life and property through the development and application of fire prevention engineering, education, and enforcement; CalFire provides fire protection services for State and privately-owned wildlands.

California Water Code

Division 7 of the California Water Code, commonly referred to as the Porter-Cologne Water Quality Control Act, created the SWRCB and the RWQCB. In addition, water quality responsibilities are established for the SWRCB and RWQCBs.[54]

LOCAL

City of Clovis General Plan

The following policies of the General Plan related to hazards and hazardous materials are applicable to the proposed Project:[55]

Environmental Safety Element

- **Environmental Safety Policy 1.4 Facilities that use hazardous materials.** Prohibit facilities using, storing, or otherwise involved with hazardous or toxic materials to be located in the 100-year flood zone, unless all standards of elevation, flood proofing and storage have been implemented.
- **Environmental Safety Policy 2.1 Safe storage and maintenance.** The use and storage of hazardous materials shall comply with applicable federal, state, and local laws to prevent and mitigate hazardous materials releases.
- **Environmental Safety Policy 2.2 Mitigation and remediation of groundwater contamination.** Actively participate in local and regional efforts directed at mitigating environmental exposure to and cleaning up contaminated groundwater.
- **Environmental Safety Policy 2.3 Truck routes for hazardous materials.** Maintain designated truck routes for the transportation of hazardous materials through the City. Discourage routes that pass through residential neighborhoods to the maximum extent feasible.
- **Environmental Safety Policy 2.4 Hazardous materials response team.** Maintain a Type 1 hazardous materials response team serving the City of Clovis.

[54] California Water Code, Division 7. Water Quality [13000 – 16104]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=WAT&division=7.&title=&part=&chapter=&article=&nodetreepath=8. Accessed February 2024.

[55] Clovis General Plan. August 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed January 2024.

- **Environmental Safety Policy 2.5 Safer Alternatives**. Minimize the use of hazardous materials by encouraging the selection of non-toxic alternatives that do not pose a threat to the environment.
- **Environmental Safety Policy 2.6 Community education.** Provide educational resources to residents and businesses to promote safe practices related to the use, storage, transportation, and disposal of hazardous materials.
- **Environmental Safety Policy 3.11 Airport land use compatibility.** Approve land uses in a manner that is consistent with the Fresno Yosemite International Airport Land Use Compatibility Plan.

Public Facilities and Services Element

- **Public Facilities and Services Policy 6.8 Emergency preparedness planning.** Maintain an emergency operations plan, an emergency operations center, and a hazard mitigation plan to prepare for actual or threatened conditions of disaster or extreme peril.

Certified Unified Program Agency (CUPA)

The California EPA designates specific local agencies as Certified Unified Program Agencies (CUPA), typically at the county level. The FCEHS is the CUPA designated for Fresno County. The FCEHS is responsible for the implementation of statewide programs within its jurisdiction, including Underground storage of hazardous substances (USTs), Hazardous Materials Business Plan (HMP) requirements, California Accidental Release Prevention (Cal-ARP) program, etc. Implementation of these programs involves permitting, inspecting, providing education/guidance, investigations, and enforcement.

San Joaquin Valley Air Pollution Control District

San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over the City of Clovis and deals with pollutants that get into the air from stationary (including fumes, dust and smoke, some asbestos) and mobile sources. SJVAPCD's mission is to improve the health and quality of life for all Valley residents through efficient, effective, and entrepreneurial air quality management strategies. SJVAPCD responds to complaints about smells, answers questions about air quality management permits, and reviews development projects for compliance with air quality and greenhouse gas significance thresholds. The SJVAPCD and air quality are addressed in detail in Section 3.3, Air Quality, of this EIR.

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

- 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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;
- 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 for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: Potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant with Mitigation)

CONSTRUCTION IMPACTS

Based on the findings of the Phase I ESA and subsequent research and interviews, there was no evidence of controlled RECs or historical RECs in connection with the site, as defined by ASTM E 1527-13; however, RECs, ASTM Non-Scope issues and site development issues were identified, as described below:

REC: Evidence of a UST was observed adjacent to the southeastern corner of a storage shed to the adjacent west of the Contractor's Corp Yard. One metal vent pipe was observed adjacent to a metallic pipe protruding from the ground with a hand pump fixed to the top. According to Mr. Richard Smith, owner, the UST was removed approximately 40 years ago; however, based on the findings of the Phase II LSS, an approximately eight-foot by eight-foot UST was detected at a depth of 1.5 feet below the ground surface in this location.[56] According to the SWRCB GeoTracker database, one 500-gallon unleaded gasoline UST was utilized at the subject site in association with the former poultry/turkey ranch. Regulatory databases identify the UST's status as "active". No records of the UST removal, soil sample analysis, or a Closure Letter are on file with FCEHS, and no

[56] Krazan & Associates, Inc. Report of Findings, Phase II Limited Subsurface Survey and Soil Pile Sampling, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. August 30, 2021.

additional information is included on GeoTracker. Based on the presence of the former UST, the potential exists for petroleum hydrocarbon constituents to have impacted the subsurface in the event a past release occurred. The subsurface conditions around the reported former UST are unknown; therefore, the lack of documentation pertaining to the removal of the gasoline UST represents a REC at the subject site.

ASTM Non-Scope Issue: The structures located on the subject site were constructed prior to 1978; therefore, based on the date of construction, asbestos-containing materials ACMs or LBP may be present at the subject site. An ACM and/or LBP survey and sampling of the on-site structures was not included within the scope of this assessment; therefore, it is unknown whether the on-site structures contain ACMs or LBP.

Site Development Issues: The subject site has been developed with a domestic water well, septic and leach field system, propane fuel tanks, and an irrigation well and pump. In addition, numerous trash piles and various types of debris piles, including waste tires, glass bottles, scrap wood, metal piping, empty rusted drums, empty buckets, concrete irrigation pipes, wooden pallets, appliances, various pieces of farm equipment, and green waste and vegetation were observed in numerous areas of the subject site, specifically in the southern portion near the former poultry operations and across the Contractor's Corp Yard and vehicle maintenance and repair shed. Not all areas were observable due to the excessive quantity of materials in the debris piles and/or access limitations during the Phase I ESA site reconnaissance.

Construction workers and the public could be exposed to hazards and hazardous materials because of improper handling or use during construction activities (particularly by untrained personnel); transportation accidents; or fires, or other emergencies. Construction workers could also be exposed to hazards associated with accidental releases of hazardous materials, which could result in significant impacts to the health and welfare of people and/or wildlife. Additionally, an accidental release into the environment could result in the contamination of water, habitat, and countless resources. Compliance with existing regulatory requirements of the RWQCB would require the preparation of a project specific Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would be required to include project specific best management measures (BMPs) that are designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, and runoff during construction activities.

The proposed Project would also be required to comply with regulations on the transportation of hazardous materials codified in 49 CFR 173 and 49 CFR 177 and CCR Title 26, Division 6. These regulations, which are under the jurisdiction of Caltrans and the California Highway Patrol (CHP), provide specific packaging requirements, define unacceptable hazardous materials shipments, and prescribe safe-transit practices by carriers of hazardous materials. Compliance with these regulations would reduce the risk of exposure to humans and the environment related to the transportation of hazardous materials.

Hazardous materials regulations, which are codified in CCR Titles 8 and 22, and their enabling legislation set forth in Chapter 6.5 (Section 25100 et seq.) of the California Health and Safety Code, were established at the state level to ensure compliance with federal regulations to reduce the risk

to human health and the environment from the routine use of hazardous substances. Construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to, CCR Titles 8 and 22, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; and construction vehicles shall be inspected daily for leaks. Off-site activities (e.g., utility construction) would also be required to comply with these regulations. These regulations and codes must be implemented, as appropriate, and are monitored by the State and/or local jurisdictions, including the FCEHS.

Contractors would be required to comply with California EPA's Unified Program; regulated activities would be managed by FCEHS, the designated CUPA for Fresno County, in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California UFC hazardous material management plans and inventories).

Mitigation Measure 3.8-1 would be required to ensure that a well abandonment permit is obtained from Fresno County Department of Public Health Environmental Health Division, and that all on-site domestic water wells, septic and leach field system, propane fuel tanks, and irrigation and well pump are properly abandoned and/or removed. Mitigation Measure 3.8-2 would be required to ensure that additional testing is performed prior to the issuance of grading permits for construction activities where the potential presence of the UST, a REC, may be present. The additional testing will determine whether any of these areas contain hazardous materials that would require special treatment. Mitigation Measure 3.8-2 requires the removal of the UST located southeast of the Contractor's Corp Yard, which was discovered during the course of the Phase II LSS. Mitigation Measure 3.8-3 also specifies that all construction or demolition activities comply with Cal OSHA asbestos and lead worker construction standards, offsite disposal requirements, and requirements for additional studies prior to development of MPArea 2. This measure also provides specifications for additional soil sampling in stained areas prior to soil disturbance activities. Overall, consistency with federal, State, and local laws and regulations related to the handling of hazardous materials discussed above, including implementation of Mitigation Measures 3.8-1, 3.8-2, and 3.8-3 would ensure that potential impacts are reduced to a **less than significant** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.8-1*: Prior to the acceptance of improvements, the Project proponent shall hire a licensed well contractor to obtain a well abandonment permit from Fresno County Department of Public Health Environmental Health Division, and properly abandon the on-site domestic water wells, septic and leach field system, propane fuel tanks, and irrigation and well pump, pursuant to review and approval of the City Engineer and the Fresno County Department of Public Health Environmental Health Division.*

Mitigation Measure 3.8-2: *Prior to any grading or construction activities in the vicinity of the Contractor's Corp Yard, removal of the eight-foot by eight-foot UST, including any associated pipes or wires, shall be undertaken in accordance with all applicable local, state and federal regulations.*

Mitigation Measure 3.8-3: *The Project proponent shall hire a qualified consultant to perform additional testing prior to the issuance of grading permits for construction activities in the following areas that have been deemed to have potentially hazardous conditions present:*

- *Prior to the disturbance of any suspect ACMs or LBP at the subject site, via renovation or demolition, comprehensive ACM and LBP surveys are required.*
- *During the removal of debris from the site in preparation for grading and construction activities associated with the proposed residential development, should indications of potential hazardous materials or evidence of impacted soil be observed, the Applicant would be contracted to determine whether surficial soils have been potentially impacted and whether sampling would be recommended. In addition, debris should be removed and transported off-site for proper disposal.*
- *Prior to any grading or construction activities in the MPArea 2, a Phase I ESA should be undertaken to characterize the site.*

OPERATIONAL IMPACTS

The operational phase of the proposed Project will occur after construction is completed and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes the development of residential structures, which may need to utilize a variety of hazardous materials commonly found in urban areas, including paints, insecticides, detergents, cleaners, and cleaning solvents. If handled appropriately and in compliance with applicable regulations, these materials do not pose a significant risk. Overall, with incorporation of mitigation, the proposed Project would have a **less than significant** impact relative to this issue.

Impact 3.8-2: Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant)

There are no hazardous emissions anticipated to be located within one-quarter mile of an existing or proposed school. Students generated because of Project implementation, would most likely attend Riverview Elementary School (approximately 2.9 miles west), Grant Ridge Intermediate School (approximately 3.3 miles northwest), and Clovis North High School (approximately 3.4 miles northwest), as these are the schools currently assigned to the addresses at the proposed Project site; however, student placement is subject to CUSD's determination. There is also a possibility that a new school is developed within the Master Plan area. There are no hazardous emissions or materials presenting a concern for a new school if it were to be built. Therefore, development of the proposed Project would have a **less than significant** impact relative to this environmental issue.

Impact 3.8-3: Potential to result in impacts from being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. (Less than Significant with Mitigation)

The hazards assessment included a site reconnaissance, interviews, historical land use research, and database research in MPArea 1. MPArea 1 is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, based on the Phase I ESA, there is one REC associated with the suspected 500-gallon UST on the Project site. Implementation of Mitigation Measures 3.8-1 and 3.8-2 would be applicable to the proposed Project, requiring additional surveys to determine any further actions related to the proper handling of RECs. MPArea 2 will be required to comply with Mitigation Measures 3.8-1. 3.8-2, and 3.8-3. With implementation of mitigation, impacts related to development of the proposed Project would have a **less than significant** impact relative to this environmental issue.

Impact 3.8-4: The Project is not located within an airport land use plan, two miles of a public airport or public use airport, and would not result in a safety hazard for people residing or working in the project area (Less than Significant)

There are no documented public airports or public use airports within proximity to the Project site. The nearest airport facility within the vicinity of the Project site is the Fresno Yosemite International Airport, located approximately 6.5 miles southwest of the Project site. The Project site is not located within the airport influence area or within the Airport's noise exposure contours for the Fresno Yosemite International Airport as identified in the Airport Land Use Compatibility Plan (ALUCP). Therefore, development of the proposed Project would have a **less than significant** impact with regards to this environmental issue.

Impact 3.8-5: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

The Fresno County Master Emergency Services Plan serves as the Emergency Plan for Fresno County. This plan serves as a guide for response to an emergency/disaster in the unincorporated areas of the Fresno County Operational Area, and to coordinate and assist with the disaster response in jurisdictions both within and outside of the Fresno County Operational Area. In addition to the Fresno County Operational Area Master Emergency Services Plan, hazard specific response plans and standard operating procedures have been developed or are in the process of development to supplement this master plan with disaster/emergency specific response procedures and information.

The County also prepared a Fresno County Multi-Jurisdictional Hazard Mitigation Plan. This plan underwent a comprehensive update in 2017-2018 building upon the plan that was originally developed in 2009. This plan demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This plan was also developed to make Fresno County and participating jurisdictions eligible for certain

federal disaster assistance, specifically, the Federal Emergency Management Agency's Hazard Mitigation Grant Program, Pre-Disaster Mitigation program, and Flood Mitigation Assistance (FMA). This plan also meets the planning requirements of the National Flood Insurance Program's Community Rating System, to earn points under CRS Activity 510, which could lower flood insurance premiums in CRS communities.

In Fresno County, all major roads are available for evacuation, depending on the location and type of emergency that arises. The proposed Project does not include any actions that would impair or physically interfere with any of Fresno County's emergency plans or evacuation routes. Future uses on the Project site will have access to the County resources that establish protocols for safe use, handling, and transport of hazardous materials. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder emergency vehicle access or evacuation in the event of an emergency. Any construction project that could involve road closures, traffic detours and congestion, shall be required to obtain traffic control plans approved by the City as the lead agency. Therefore, development of the proposed Project would have a **less than significant** impact with regards to this environmental issue.

Impact 3.8-6: Potential to expose people or structures to a risk of loss, injury, or death from wildland fires. (Less than Significant)

The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. Fresno County has areas with an abundance of flashy fuels (i.e. grassland) in the foothill areas of Fresno County.

Wildfires are a potential hazard to development, including land uses located in the foothill and forested areas of the City. The severity of wildfire problems depends on a combination of vegetation, climate, slope, and people. The vegetation and topography found in the eastern portions of the City, coupled with hot, dry summers, present fire hazards during critical fire periods for much of Fresno County. In addition to natural factors such as lightning, human activity is a primary factor contributing to the incidence of wildfires. Campfires, smoking, debris burning, arson, public utility infrastructure, and equipment use are common human-related causes of wildfires.

The Project site is not categorized as a VHFHSZ by CalFire and is located within an LRA. While the Project site is not in an SRA, the eastern edge of the Project site, bordered by North Carson Avenue, is designated by CalFire as a moderate fire hazard severity zone and in a SRA. The Project would involve grading and clearing of the site to develop it with residential uses, and as such, the likelihood of risk from wildfires would not increase as a result of wildland fires. Furthermore, the Project would be required to comply with all applicable regulations related to the provision of fire water, emergency access, and construction materials that would minimize and/or prevent fire loss and damage. All plans would be reviewed for approval by the appropriate agencies. Therefore, the proposed Project would have a **less than significant** impact with regards to this environmental issue.

This section describes the regulatory setting, regional hydrology, and water quality, impacts that are likely to result from Project implementation, and measures to reduce potential impacts to water quality.

This section is based in part on the following documents, reports, and studies:

- *City of Clovis General Plan, 2014*;
- *City of Clovis General Plan Draft Program Environmental Impact Report, 2014*;
- *Fresno-Clovis Storm Water Quality Management Program, 2013*;
- *California's Groundwater: Bulletin 118 - San Joaquin Valley Groundwater Basin/Kings Subbasin, 2006*;
- *Geotechnical Engineering Investigation Proposed Residential Development, Behymer and Armstrong Avenues, Clovis California*, prepared by Krazan & Associates, Inc. and dated March 10, 2021;
- *Geotechnical Feasibility Evaluation, Triangle Development, Shepherd Avenue and Locan Avenue, Clovis California*, prepared by Krazan & Associates, Inc. and dated December 7, 2023 (revised January 4, 2024)
- *Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California, prepared by Krazan & Associates, Inc. and dated January 31, 2024; and*
- *City of Clovis Urban Water Management Plan 2020 Update, 2021*.

Four comments were received during the public review period or scoping meeting for the Notice of Preparation (NOP) regarding this topic from the following: County of Fresno Department of Public Health (November 2, 2023); County of Fresno Department of Public Works and Planning (November 3, 2023); Fresno Irrigation District (November 7, 2023); and Fresno Metropolitan Flood Control District (November 17, 2023). These comments are addressed within this section. Full comments received are included in Appendix A.

3.9.1 ENVIRONMENTAL SETTING

REGIONAL HYDROLOGY

The Project site is located within the San Joaquin Valley, which is surrounded on the west by the Coast Ranges, on the south by the San Emigdio and Tehachapi Mountains, on the east by the Sierra Nevada mountain range, and on the north by the Sacramento-San Joaquin Delta (Delta) and Sacramento Valley.[1] The northern portion of the San Joaquin Valley drains toward the Delta by the San Joaquin River and its tributaries, the Fresno, Merced, Tuolumne, and Stanislaus Rivers. The southern portion of the valley is internally drained by the Kings, Kaweah, Tule, and Kern Rivers that

[1] California Department of Water Resources, California's Groundwater (Bulletin 118), San Joaquin Valley Groundwater Basin Kings Subbasin. October 2003 (revised January 2006). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_01_EasternSanJoaquinSubbasin.pdf. Accessed February 2024.

flow into the Tulare drainage basin, including the beds of the former Tulare, Buena Vista, and Kern Lakes.

The San Joaquin and Kings Rivers are the two principal rivers within or bordering the Kings subbasin, where the Project site is located.[2, 3] The Fresno Slough and James Bypass are along the western edge of the subbasin and connect the Kings River with the San Joaquin River. Average annual precipitation values range from seven to 10 inches, increasing eastward.

Watersheds

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

Watersheds are delineated by the United States Geological Survey (USGS) using a nationwide system based on surface hydrologic features.[4] These hydrologic units are classified into four levels (regions, subregions, accounting units, and cataloging units), with each unit being identified by a unique hydrologic unit code (HUC) based on its level within the hierarchical system. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. The USGS system divides the United States into regions (HUC-2), subregions (HUC-4), basins (HUC-6), subbasins (HUC-8), watersheds (HUC-10), and sub-watersheds (HUC-12).

Figure 3.9-1 shows the principal watersheds in the area. As shown, the Project site is located within the Dry Creek and James Bypass watersheds (HUC-10) within the Upper Dry subbasin (HUC-8) of the Tulare-Buena Vista Lakes basin (HUC-6).

Groundwater

The City of Clovis is underlain by the Kings Groundwater Subbasin.[5] The Kings Subbasin is bounded on the north by the San Joaquin River, on the west by the Delta-Mendota and Westside Subbasins, the south by the Kings River South Fork and the Empire West Side Irrigation District, and on the east

[2] California Department of Water Resources, California's Groundwater (Bulletin 118), San Joaquin Valley Groundwater Basin Kings Subbasin. October 2003 (revised January 2006). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_01_EasternSanJoaquinSubbasin.pdf. Accessed February 2024.

[3] California Department of Water Resources, Bulletin 118 Groundwater Basin Lookup. Available at: https://dwr.maps.arcgis.com/apps/Styler/index.html?appid=740d10eefd6148579321a3abcd065a36. Accessed February 2024.

[4] United States Geological Survey (USGS), Hydrologic Unit Maps: What are Hydrologic Units? Available at: https://water.usgs.gov/GIS/huc.html. Accessed February 2024.

[5] California Department of Water Resources, Bulletin 118 Groundwater Basin Lookup. Available at: https://dwr.maps.arcgis.com/apps/Styler/index.html?appid=740d10eefd6148579321a3abcd065a36. Accessed February 2024.

by the Sierra Nevada foothills.[6] The Kings Subbasin covers a surface area of approximately 1,530 square miles. The two principal rivers overlying the subbasin are the San Joaquin River and Kings River. The Fresno Slough and James Bypass are located along the western edge of the southern basin and connect the Kings River to the San Joaquin River. The Kings Subbasin contains multiple interconnected subbasins that transmit, filter, and store water: the Kaweah and Tulare Lake subbasins to the south; Westside and Delta-Mendota subbasins to the west; and Madera subbasin to the north.[7] Groundwater recharge to the subbasin occurs from river and stream seepage, deep percolation of irrigation water, canal seepage, and intentional recharge.[8]

LOCAL SETTING

The Project site is located directly north of the City of Clovis limit line in unincorporated Fresno County. The Project site is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues. The Project site is within portions of Sections 21, 22, and 23 of Township 12 South, Range 21 East, Mount Diablo Base and Meridian. The Project site is characterized as flat to gently sloping southerly and westerly, with elevations varying from approximately 385 to 400 feet above mean sea level (amsl). There is a knoll at the northeast corner of the Project area that varies in elevation from 395 to 440 feet amsl.

The Development Area consists of a combination of fallow and grazing land, several rural residences, offices and Contractor's Corp Yard and a small tree nursery. The Non-Development Area contains existing rural residential uses and agricultural fields.

SURFACE WATER AND FLOOD CONTROL FACILITIES

Local Surface Waters and Drainage

As indicated in the Clovis General Plan EIR, the Clovis General Plan study area is within the drainages of three streams: Dry Creek, Dog Creek, and Redbank Slough.[9] The Big Dry Creek Reservoir and Dam are located northeast of the Project site. The Master Plan Area is bisected by the Big Dry Creek Reservoir Outlet Works channel fed by the Big Dry Creek Dam. When the dam was constructed, the natural Dry Creek drainage was re-routed into the reservoir basin; flow now exits via the channel

[6] California Department of Water Resources, California's Groundwater (Bulletin 118), San Joaquin Valley Groundwater Basin Kings Subbasin. October 2003 (revised January 2006). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_01_EasternSanJoaquinSubbasin.pdf. Accessed February 2024.

[7] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[8] California Department of Water Resources, California's Groundwater (Bulletin 118), San Joaquin Valley Groundwater Basin Kings Subbasin. October 2003 (revised January 2006). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_01_EasternSanJoaquinSubbasin.pdf. Accessed February 2024.

[9] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-09-Hydrology-and-Water-Quality.pdf. Accessed January 2024.

and is conveyed via the channel to rejoin the Creek about 2,500 feet below the outlet. The truncated and abandoned channel of Dry Creek remains a conspicuous feature in the east-central portion of the site, but no longer conveys flow, all of which has been re-routed via the Reservoir, Dam, outlet works, and channel. The remnant Creek channel exhibits intermittent stream geomorphology but lacks an ordinary high-water mark (OHWM). It does not have hydric soils and supports only upland vegetation.

The Big Dry Creek Reservoir Outlet Works Channel is a man-made channel that conveys controlled stormwater releases from Big Dry Creek Reservoir until it converges with the native stream course of Big Dry Creek near the southwest corner of the Development Area.[10] In addition, Behymer Tributaries MID-1 and MID-4 are water courses that traverse the Development Area. Behymer Tributaries MID-2 and MID-3 are water courses that are located within the Non-Development Area.

The Project site is located within the service area of the Fresno Metropolitan Flood Control District (FMFCD).[11] The FMFCD provides flood control and urban storm water services in a 399-square mile watershed located between the Kings and San Joaquin Rivers.[12] The Fresno/Clovis urban area is served by a system of roughly 700 miles of pipeline and more than 150 stormwater retention basins. FMFCD's stormwater drainage system consists of interconnected surface conveyances, storm drains, detention basins (stormwater basins), pump stations, and outfalls.[13] The stormwater basins discharge to groundwater, irrigation canals, creeks, and the San Joaquin River. The system is designed to retain and infiltrate as much runoff as possible into the underlying groundwater aquifer. On average, FMFCD's regional stormwater basin system captures 92 percent of annual rainfall, of which, 70-85 percent of the captured stormwater runoff is recharged into the local groundwater aquifer.[14] The stormwater basins also remove 50-80 percent of the typical stormwater pollutants.

The FMFCD Master Plan storm drainage pipeline system is designed to accept the peak flow rate of runoff from a two-year intensity storm event (a storm that has a 50 percent probability of occurring in any given year).[15] When storm events occur that exceed the two-year intensity, ponding begins to occur in the streets until the pipeline system can remove the water. If the storm is of sufficient

[10] Fresno Metropolitan Flood Control District, Fresno Metropolitan Flood Control District Comments for Notice of Preparation of an Environmental Impact Report for Vista Ranch Project. November 17, 2023.
[11] Fresno Metropolitan Flood Control District, Flood Control Program. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Flood-Control-Program-Fact-Sheet.pdf. Accessed February 2024.
[12] Fresno Metropolitan Flood Control District, About Fresno Metropolitan Flood Control District. Available at: https://www.fresnofloodcontrol.org/. Accessed February 2024.
[13] Fresno-Clovis Storm Water Quality Management Program. November 2013. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Stormwater-Quality-Management-Plan.pdf. Accessed February 2024.
[14] Fresno Metropolitan Flood Control District, Fresno-Clovis Storm Water Quality Management Program FY 2019-20 Annual Report. October 2020. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Fresno-Clovis-Storm-Water-Quality-Management-Program-2019-2020-Annual-Report.pdf. Accessed February 2024.
[15] Fresno Metropolitan Flood Control District, Annual Budget Fiscal Year Ending June 30, 2023. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/2022-2023-Annual-Budget.pdf. Accessed February 2024.

intensity to generate more water than the street can store, the water will continue to rise until it reaches a topographic outlet where it can escape down gradient. This escape route is a feature of the major storm routing system, implemented in 1998, that protects properties from damage in rainfall or runoff events that exceed system design capacities.

Most of the Project site is located within Drainage Areas BY1 (western portion of Project site) and BX (eastern portion of Project site); a small portion of the Project site, located in the southern portion near East Shepherd Avenue, is located within Drainage Area BT.[16]

Surface Water Quality

Surface water quality is affected by point source and non-point source pollutants. Point source pollutants are those emitted at a specific point, such as a pipe, while non-point source pollutants are typically generated by surface runoff from diffuse sources, such as streets, paved areas, and landscaped areas. Point source pollutants are controlled with pollutant discharge regulations or waste discharge requirements. Non-point source pollutants are more difficult to monitor and control, although they are important contributors to surface water quality in urban areas.

Stormwater runoff pollutants vary based on land use, topography, the amount of impervious surface, and the amount and frequency of rainfall and irrigation practices. Runoff in developed areas typically contains oil, grease, and metals accumulated in streets, driveways, parking lots, and rooftops, as well as pesticides, herbicides, particulate matter, nutrients, animal waste, and other oxygen-demanding substances from landscaped areas. The highest pollutant concentrations usually occur at the beginning of the wet season during the "first flush."

Water quality in Fresno County is governed by the Central Valley Regional Water Quality Control Board (RWQCB) (Region 5), which sets water quality standards in the Water Quality Control Plan (Basin Plan). The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses.

303(D) IMPAIRED WATER BODIES

Section 303(d) of the federal Clean Water Act (CWA) requires states to identify water bodies that do not meet water quality standards or objectives and are thus considered impaired. States are required to include a priority ranking of such waters, taking into account the severity of the pollution and the uses to be made of such waters, including waters targeted for the development of a total maximum daily load (TMDL).[17] A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standard. The

[16] Fresno Metropolitan Flood Control District, Fresno Metropolitan Flood Control District Map. Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=5ac65186b1794949a1fda62ca7734986. Accessed February 2024.

[17] California State Water Resources Control Board, Final Staff Report, 2020-2022 Integrated Report for Clean Water Act Sections 303(d) and 305(b). Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2020_2022state_ir_reports_revised_final/2020-2022-integrated-report-final-staff-report.pdf. Accessed February 2024.

purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

Several waterbodies within Fresno County are included on the Section 303(d) list, including the San Joaquin River (Friant Dam to Mendota Pool), which is listed as impaired for invasive species; pH; and temperature, water.[18] Big Dry Creek, via Herndon Canal, indirectly drains into the San Joaquin River.[19]

GROUNDWATER RESOURCES

Groundwater Supply

The Kings Subbasin underlies the City of Clovis and the Project site, and is part of the San Joaquin Valley Groundwater Basin.[20] The Kings Subbasin is not adjudicated,[21] meaning the groundwater rights within the subbasin have not been determined by a court. Additionally, the Kings Subbasin is designated as a high-priority basin by the California Department of Water Resources (DWR) and is considered critically over drafted.[22] As such, the Kings Subbasin is required to submit and implement a Groundwater Sustainability Plan (GSP), pursuant to the Sustainable Groundwater Management Act (SGMA). Groundwater in the subbasin is managed by the North Kings Groundwater Sustainability Agency (NKGSA).[23] The NKGSA adopted the North Kings GSP in 2019 (the GSP was subsequently revised in 2022 following DWR's review).

NORTH KINGS GROUNDWATER SUSTAINABILITY AGENCY

The City of Clovis and County of Fresno are both members of the NKGSA. The NKGSA is one of seven Groundwater Sustainability Agencies (GSAs) within the Kings Subbasin and manages the northeast

[18] California State Water Resources Control Board, California 2020-2022 Integrated Report (303(d) List/305(b) Report). Available at: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html. Accessed February 2024.

[19] Fresno-Clovis Storm Water Quality Management Program. November 2013. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Stormwater-Quality-Management-Plan.pdf. Accessed February 2024.

[20] California Department of Water Resources, Bulletin 118 Groundwater Basin Lookup. Available at: https://dwr.maps.arcgis.com/apps/Styler/index.html?appid=740d10eefd6148579321a3abcd065a36. Accessed February 2024.

[21] Provost & Pritchard, North Kings Groundwater Sustainability Agency Groundwater Sustainability Plan. Adopted November 2019 (Revised June 2022). Available at: https://northkingsgsa.org/groundwater-sustainability-plan/. Accessed February 2024.

[22] California Department of Water Resources, SGMA Basin Prioritization Dashboard. Available at: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed February 2024.

[23] Provost & Pritchard, North Kings Groundwater Sustainability Agency Groundwater Sustainability Plan. Adopted November 2019 (Revised June 2022). Available at: https://northkingsgsa.org/groundwater-sustainability-plan/. Accessed February 2024.

portion of the subbasin.[24] Each GSA in the Kings Subbasin prepares their own GSP. The NKGSA is working collaboratively under a coordination agreement with the other six GSAs in the Kings Subbasin to achieve sustainable groundwater conditions by 2040, in accordance with SGMA.

SGMA identifies six sustainability indicators to be monitored and reported to document sustainability: lowering groundwater levels, reduced groundwater storage, seawater intrusion, degraded groundwater quality, land subsidence, and surface water depletion. The NKGSA documents and is responsible for implementing sustainability measures for all these indicators, except for seawater intrusion, which is not applicable to the Kings Subbasin due to its distance from the Pacific Ocean.

CITY-PRODUCED GROUNDWATER

The City of Clovis' water system relies on three main water supply sources: groundwater, surface water, and recycled water.[25] It should be noted that, for the proposed Project, the City will rely more on surface water than groundwater in accordance with the Urban Water Management Plan. However, for full context of the City's available water sources, the following discussion of groundwater is provided.

In 2020, groundwater provided nearly half (49 percent) of the total potable water use. The City's groundwater system contains more than 30 wells with a total capacity of approximately 37,690 gallons per minute (gpm) with another 4,750 gpm of additional capacity planned. Several wells are offline or on standby due to water quality concerns, or are inactive due to being dry or producing too much sand.

Recharging the underground aquifer is a very important aspect in the use of groundwater for supply and is one of the means to address basin overdraft.[26] According to the North Kings GSP, existing recharge areas within the NKGSA area include both natural areas and constructed recharge basins. Natural recharge occurs from seepage from the San Joaquin River, Kings River, and intermittent streams.[27] Natural recharge from percolation of precipitation is considered minor. Several agencies engage in groundwater recharge efforts, including seepage in unlined canals, reservoirs, stormwater basins, wastewater effluent ponds, and recharge basins. Deep percolation of agricultural and landscape irrigation also makes significant contributions to groundwater recharge. The amount of groundwater recharge varies annually and is highly dependent on precipitation, especially in

[24] Provost & Pritchard, North Kings Groundwater Sustainability Agency Groundwater Sustainability Plan. Adopted November 2019 (Revised June 2022). Available at: https://northkingsgsa.org/groundwater-sustainability-plan/. Accessed February 2024.
[25] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.
[26] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.
[27] Provost & Pritchard, North Kings Groundwater Sustainability Agency Groundwater Sustainability Plan. Adopted November 2019 (Revised June 2022). Available at: https://northkingsgsa.org/groundwater-sustainability-plan/. Accessed February 2024.

watersheds to the Kings River. [28] In 2020, recharge was 5,316 acre-feet (AF), while the City's 30-year average groundwater recharge quantity is approximately 8,412 AFY. In the past 30 years the groundwater table has dropped 48 feet, from a depth of 92 feet in 1991 to a depth of 140 feet in 2019. The amount of groundwater extracted by the City from the Kings Subbasin has reduced since 2016 and is expected to continue to be reduced with implementation of water conservation measures and increased supplies from non-groundwater sources.

Water Supply Assessment

A more complete analysis of the water demand and supply for the City of Clovis and the proposed Project is provided in Section 3.14, Utilities.

FLOODING AND INUNDATION

Flooding events can result in damage to structures, injury or loss of human and animal life, exposure of waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater.

Regionally, the major flood issues are associated with the San Joaquin River, the Kings River, and their tributaries.[29] Three major dams have been constructed to control flows on the rivers, including Friant and Mendota Dams on the San Joaquin River and Pine Flat Dam on the Kings River. In addition, several reservoirs, detention basins, and canals have been constructed on streams east of the Fresno-Clovis area to prevent flooding and to convey flows around developed areas.

Flood protection in the City of Clovis is afforded by Big Dry Creek Dam on Dry Creek, located adjacent to Project site.[30] The dam's main purpose is flood control, and it has a storage capacity of 30,200 AF. The Big Dry Creek Dam impounds stormwater runoff from Big Dry Creek in the Big Dry Creek Reservoir, which is owned and operated by the FMFCD. The Big Dry Creek Dam provides 230-year flood level of protection.

FEMA Floodplain Mapping

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the majority of the Project site is located within an area of minimal flood hazard (Zone X areas determined to be outside the 0.2-percent [500-year] annual chance floodplain).[31] Portions of the Project site are located within the 500-year flood zone (Zone X, areas of 0.2 percent annual chance

[28] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[29] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-09-Hydrology-and-Water-Quality.pdf. Accessed January 2024.

[30] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

[31] Federal Emergency Management Agency, Flood Insurance Rate Map, Map Numbers 06019C1585H, 06019C1580H, 06019C1045H, and 06019C1040H. February 2009. Available at: https://msc.fema.gov/portal/search. Accessed February 2024.

[500-year] flood; areas of one-percent annual chance [100-year] flood with average depths of less than one foot or with drainage areas with less than one square mile; and areas protected by levees from the one percent annual chance [100-year] flood). The central and western portions of the Project site, largely outside of the Development Area, are within the 100-year flood zone (special flood hazard areas subject to inundation by the one-percent annual chance flood). It is noted that a portion of the 100-year flood zone (associated with Big Dry Creek Reservoir Outlet Works Channel) runs in a southwesterly direction through the center of the Development Area. Figure 3.9-2 shows the 100- and 500-year flood boundaries in relation to the Project site.

Dam Failure

The Project site is located within dam failure inundation areas associated with the Big Dry Creek Dam, as shown in Figure 3.9-3. Dam failure is generally a result of structural instability caused by improper design or construction, instability resulting from seismic shaking, or overtopping and erosion of the dam. Dams that are higher than 25 feet or with storage capacities over 50 AF of water are regulated by the California Dam Safety Act[32], which is implemented by the California Department of Water Resources, Division of Safety of Dams (DSOD). The DSOD is responsible for inspecting and monitoring these dams. The Act also requires that dam owners submit to the California Office of Emergency Services inundation maps for dams that would cause significant loss of life or personal injury because of dam failure. The County Office of Emergency Services is responsible for developing and implementing a Dam Failure Plan that designates evacuation plans, the direction of floodwaters, and provides emergency information.

Tsunami and Seiche

Seiches are changes or oscillations of water levels within a confined water body. Seiches may be caused by fluctuation in the atmosphere, tidal currents, or earthquakes. Large, inland bodies of water that could generate seiches include retention basins and reservoirs such as the Big Dry Creek Reservoir, located east of the Project site.

A tsunami is a series of waves in a water body caused by the displacement of a large volume of water, generally in an ocean or a large lake due to earthquakes, volcanic eruptions, and other underwater explosions. The Project site is approximately 118 miles from the coastline of the Pacific Ocean.

3.9.2 REGULATORY SETTING

There are several regulatory agencies whose responsibility includes the oversight of the water resources of the state and nation including the Federal Emergency Management Agency, the US Environmental Protection Agency, the State Water Resources Board, and the Regional Water Quality Control Board. The following is an overview of the federal, State, and local regulations that are applicable to the proposed Project.

[32] California Department of Water Resources, Jurisdictional Sized Dams. Available at: https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams/Jurisdictional-Sized-Dams. Accessed February 2024.

FEDERAL

Clean Water Act

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The CWA establishes the basic structure for regulating the discharges of pollutants into the waters of the United States and gives the US Environmental Protection Agency (EPA) the authority to implement pollution control programs. The statute's goal is to regulate all discharges into the nation's waters and to restore, maintain, and preserve the integrity of those waters. The CWA sets water quality standards for all contaminants in surface waters and mandates permits for wastewater and stormwater discharges.

The CWA also requires states to establish site-specific water quality standards for navigable bodies of water and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The following CWA sections assist in ensuring water quality for the water of the United States:

CWA Section 208 requires the use of best management practices (BMPs) to control the discharge of pollutants in stormwater during construction. CWA Section 303(d) requires the creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies, and preparation of plans to improve the quality of these water bodies. CWA Section 303(d) also establishes TMDLs, which is the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. CWA Section 404 authorizes the US Army Corps of Engineers to require permits that will discharge, dredge or fill materials into waters in the US, including wetlands.

In California, the EPA has designated the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) with the authority to identify beneficial uses and adopt applicable water quality objectives.

The SWRCB is responsible for implementing the CWA and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits).

National Pollutant Discharge Elimination System (NPDES)

NPDES permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal CWA, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the Federal CWA and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable to achieve the CWA's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

Individual projects in the City that disturb more than one acre would be required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing Best Management Practices (BMP) the discharger would use to prevent and retain storm water runoff. The SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a waterbody listed on the 303(d) list for sediment.

U.S. Code Title 33 Section 408 (Section 408)

U.S. Code Title 33 Section 408 (Section 408) (the amended and codified Section 14 of the Rivers and Harbors Appropriation Act of 1899) allows the Secretary of the Army, upon recommendation of the USACE Chief of Engineers, to permit the alteration of a public work if the alteration is not injurious to the public interest and will not impair the usefulness of the work (33 U.S. §408). USACE considers an alteration an action that builds upon, alters, improves, moves, occupies, or otherwise affects the usefulness, or the structural or ecological integrity, of a USACE project (33 U.S. §408). Under Section 408, USACE authorization is required before carrying out an action that would alter lands and property under USACE's jurisdiction. Therefore, an action that would alter lands and waters within the Project area should be included in a USACE project, including federal levees lands and waters situated between federal levees, would require review to ascertain whether it necessitates submission of a Section 408 permission request. Such actions include the construction of a new bridge structure and the installation of pipelines across the Big Dry Creek Reservoir Outlet Channel, and any improvements to existing flood management features that would alter a USACE project.

Routine operations and maintenance (O&M) of USACE lands and property are exempt from Section 408 permissions (USACE 2016). For example, USACE-approved routine O&M undertaken by the Fresno Metropolitan Flood Control District (FMFCD), as public sponsors, of the Big Dry Creek Reservoir and Dam and Big Dry Creek Reservoir Outlet channel within the Project Development Area do not require submission of a Section 408 permission request.

Federal Emergency Management Agency

FEMA operates the National Flood Insurance Program (NFIP). Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the California Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

Flood Control Act

The Flood Control Act (1917) established survey and cost estimate requirements for flood hazards in the Sacramento Valley. All levees and structures constructed per the Act were to be maintained locally, but controlled federally. All rights of way necessary for the construction of flood control infrastructure were to be provided to the Federal government at no cost.

Federal involvement in the construction of flood control infrastructure, primarily dams and levees, became more pronounced upon passage of the Flood Control Act of 1936.

Flood Disaster Protection Act (FDPA)

The FDPA of 1973 was a response to the shortcomings of the NFIP, which were experienced during the flood season of 1972. The FDPA prohibited Federal assistance, including acquisition, construction, and financial assistance, within delineated floodplains in non-participating NFIP communities. Furthermore, all Federal agencies and/or federally insured and federally regulated lenders must require flood insurance for all acquisitions or developments in designated Special Flood Hazard Areas (SFHAs) in communities that participate in the NFIP.

Improvements, construction, and developments within SFHAs are generally subject to the following standards:

- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the base flood elevation (BFE).
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE.
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns.
- Extended foundation or other enclosure walls must be designed and constructed to withstand hydrostatic pressure and be constructed with flood-resistant materials and

contain openings that will permit the automatic entry and exit of floodwaters. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

National Flood Insurance Program (NFIP)

Per the National Flood Insurance Act of 1968, the NFIP has three fundamental purposes: Better indemnify individuals for flood losses through insurance; Reduce future flood damages through State and community floodplain management regulations; and Reduce Federal expenditures for disaster assistance and flood control.

While the Act provided for subsidized flood insurance for existing structures, the provision of flood insurance by FEMA became contingent on the adoption of floodplain regulations at the local level.

STATE

California Fish and Wildlife Code

The California Department of Fish and Wildlife (CDFW) protects streams, water bodies, and riparian corridors through the streambed alteration agreement process under Section 1600 to 1616 of the California Fish and Game Code. The California Fish and Game Code establishes that "an entity may not substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river stream, or lake" (Fish and Game Code Section 1602(a)) without notifying the CDFW, incorporating necessary mitigation and obtaining a streambed alteration agreement. The CDFWs jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

California Government Code

Relevant sections of the California Government Code are identified below.

SECTION 65302

Revised safety elements must include maps of any 200-year flood plains and levee protection zones within the general plan planning area.

SECTION 65584.04

Any land having inadequate flood protection, as determined by FEMA or DWR, must be excluded from land identified as suitable for urban development within the planning area.

SECTION 8589.4

California Government Code §8589.4, commonly referred to as the Potential Flooding-Dam Inundation Act, requires owners of dams to prepare maps showing potential inundation areas in the event of dam failure. A dam failure inundation zone is different from a flood hazard zone under the National Flood Insurance Program (NFIP). NFIP flood zones are areas along streams or coasts where storm flooding is possible from a "100-year flood." In contrast, a dam failure inundation zone is the area downstream from a dam that could be flooded in the event of dam failure due to an earthquake or other catastrophe. Dam failure inundation maps are reviewed and approved by the California Office of Emergency Services (OES). Sellers of real estate within inundation zones are required to disclose this information to prospective buyers.

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports, and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

Consumer Confidence Report Requirements

The preparation of Consumer Confidence Reports (CCRs) is required by Health & Safety Code §116470 and California Code of Regulations, Title 22, Article 20. Health & Safety Code §116470(b) also requires public water systems with more than 10,000 service connections that detect contaminants above their public health goals to provide exceedance reports every three years and to hold public hearings regarding their reports.

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the federal CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Assembly Bill 162

Assembly Bill (AB) 162 requires a general plan's land use element to identify and annually review those areas covered by the general plan that are subject to flooding as identified by flood plain mapping prepared by FEMA or DWR. The bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the conservation element of the general plan to identify rivers, creeks, streams, flood corridors, riparian habitat, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management. By imposing new duties on local public officials, the bill creates a State-mandated local program.

This bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the safety element to identify, among other things, information regarding flood hazards and to establish a set of comprehensive goals, policies, and objectives, based on specified information for the protection of the community from, among other things, the unreasonable risks of flooding.

Senate Bill 610 and Assembly Bill 901

The State Legislature passed SB 610 and AB 901 in 2001. Both measures modified the Urban Water Management Planning Act.

SB 610 requires additional information in an urban water management plan if groundwater is identified as a source of water available to an urban water supplier. It also requires that the plan include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to the project and to request identified public water systems to prepare a specified water supply assessment. The assessment must include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed Project, and water received in prior years pursuant to these entitlements, rights, and contracts.

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the way water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Senate Bill 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the

subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a "sufficient water supply" exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

200-Year Flood Protection in the Central Valley

Both State policy and recently enacted State legislation (Senate Bill 5) call for 200-year (0.5-percent annual chance) flood protection to be the minimum level of protection for urban and urbanizing areas in the Central Valley. Senate Bill (SB) 5 requires that the 200-year protection be consistent with criteria used or developed by the Department of Water Resources. SB 5 requires all urban and urbanizing areas in the Sacramento and San Joaquin Valleys to achieve 200-year flood protection to approve development. The new law restricts approval of development after 2016 if "adequate progress" towards achieving this standard is not met. Urban and urbanizing areas protected by State-Federal project levees cannot use "adequate progress" as a condition to approve development after 2028. Adequate progress is defined as meeting all the following:

1. The project scope, cost and schedule have been developed;
2. In any given year, at least 90% of the revenues scheduled for that year have been appropriated and expended consistent with the schedule;
3. Construction of critical features is progressing as indicated by the actual expenditure of budget funds;
4. The city or county has not been responsible for any significant delay in completion of the system; and
5. The above information has been provided to the DWR and the Central Valley Flood Protection Board and the local flood management agency shall annually report on the efforts to complete the project.

NPDES Construction General Permit

The California State Water Resource Control Board (SWRCB) Order WQ 2022-0057-DWQ, known as the "Construction General Permit," was adopted on September 8, 2022 and became effective on

September 1, 2023.[33] The Construction General Permit minimizes the discharge of stormwater pollutants from construction activity.

California mandates requirements for all construction activities disturbing more than one acre of land to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP documents the selection and implementation of Best Management Practices (BMPs) for a specific construction project to prevent and retain storm water runoff. The SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a waterbody listed on the State's 303(d) list for sediment. A construction site subject to the General Permit must prepare and implement a SWPPP that meets the requirements of the General Permit.

Water Quality Control Plan

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basin and Tulare Lake Basin (Basin Plans) include a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plans establish water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plans include an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under several programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plans reflect, incorporate, and implement applicable portions of several national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

State Water Resources Control Board Storm Water Strategy

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board's role in storm water resources management and evolve the Storm Water Program by: developing guiding principles to serve as the foundation of the storm water program; identifying issues that support or inhibit the program from aligning with the guiding

[33] California State Water Resources Control Board, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit), Order WQ 2022-0057-DWQ, NPDES No. CAS00002. September 2022. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/docs/2022-0057-dwq-with-attachments/cgp2022_order.pdf. Accessed February 2024.

principles; and proposing and prioritizing projects that the Water Boards could implement to address those issues.

The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board's Storm Water Program.

REGIONAL AND LOCAL

Fresno-Clovis Storm Water Quality Management Program

The Fresno-Clovis Storm Water Quality Management Program (SWQMP) was developed pursuant to Order No. R5-2013-0080 (issued by the Central Valley RWQCB in 2013).[34] The municipal NPDES stormwater permit (MS4 Permit) was issued to the FMFCD, the Cities of Fresno and Clovis, the County of Fresno, and the California State University at Fresno by the Central Valley RWQCB on May 31, 2013. The SWQMP includes specific pollution prevention and control practices for Fresno-Clovis urban drainage system planning, design, construction, and maintenance. It also includes public education to prevent stormwater pollution; specifies construction, industrial/commercial, municipal, and new development stormwater quality control practices; procedures to prevent and respond to illicit discharges and connections; monitoring to assess municipal stormwater impacts on receiving waters; and program effectiveness assessments to evaluate the effectiveness of best management practices (BMPs).

The SWQMP "control measures" refer to activities intended to minimize, reduce, eliminate, or prohibit the discharge of pollutants with the goal of improving water quality. The benefits of these control measures are assessed through evaluation of associated performance standards. The performance standards include schedules and milestones for implementation.

City of Clovis General Plan

The City of Clovis General Plan includes several policies relevant to hydrology and water quality. General Plan goals and policies applicable to the Project are identified below:[35]

Land Use Element

- Policy 4.2: Surface water entitlements. The city should not approve annexation unless any and all surface water entitlements are retained; any and all surface water entitlements shall be transferred to the city upon development.

Public Facilities and Services Element

[34] Fresno-Clovis Storm Water Quality Management Program. November 2013. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Stormwater-Quality-Management-Plan.pdf. Accessed February 2024.

[35] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February 2024.

- Policy 1.2: Water supply. Require that new development demonstrate contractual and actual sustainable water supplies adequate for the new development's demands.
- Policy 1.3: Annexation. Prior to annexation, the city must find that adequate water supply and service and wastewater treatment and disposal capacity can be provided for the proposed annexation. Existing water supplies must remain with the land and be transferred to the City upon annexation approval.
- Policy 1.5: Recycled water. Use recycled water to reduce the demands for new water supplies. Support the expansion of recycled water infrastructure throughout Clovis and require new development to install recycled water infrastructure where feasible.
- Policy 1.7: Groundwater. Stabilize groundwater levels by requiring that new development water demands not exceed the sustainable groundwater supply.

Environmental Safety Element

- Goal 1: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by natural hazards.
- Policy 1.1: Flood Zone. Prohibit development within the 100-year flood zone and dam inundation areas unless adequate mitigation is provided against flood hazards. Participate in the National Flood Insurance Program.

Open Space and Conservation Element

- Goal 3: A built environment that conserves and protects the use and quality of water and energy resources.
- Policy 3.1: Stormwater management. Encourage the use of low impact development techniques that retain or mimic natural features for stormwater management.
- Policy 3.2: Stormwater pollution. Minimize the use of non-point source pollutants and stormwater runoff.
- Policy 3.4: Drought-tolerant landscaping. Promote water conservation through the use of drought-tolerant landscaping on existing and new residential properties. Require drought-tolerant landscaping for all new commercial and industrial development and city-maintained landscaping, unless used for recreation purposes.

City of Clovis Municipal Code

The City of Clovis Municipal Code Chapter 6.7 establishes the City's Urban Storm Water Quality Management and Discharge Control Ordinance. The purpose of the ordinance is to protect and enhance the water quality of watercourses and water bodies by reducing pollutants in urban storm water discharges to the maximum extent practicable and by effectively prohibiting non-storm water discharges to the storm drain system. The ordinance prohibits any discharge that could result in or contribute to a violation of the municipal NPDES storm water discharge permit. It requires Best Management Practices (BMPs) to control the volume, rate, and potential pollutant load of storm water runoff from new development and redevelopment projects.

Chapter 8.7 requires payment of local drainage fees to fund construction of local drainage facilities and improvements.

Chapter 8.12 provides for floodplain management and regulates development in floodplains. A development permit must be obtained before construction or development within any area of special flood hazard. Permits require provisions for flood hazard reduction, including anchoring, flood-resistant materials, and construction methods to floodproof the structure.

Chapter 9.28 contains landscaping standards and requires a landscape design plan, irrigation design plan, and soil analysis to reduce runoff and control soil erosion as part of the landscape documentation package.

Chapter 9.110 provides subdivision design and improvement requirements. Per Section 9.110.040, a grading plan is required to be submitted to and approved by the City Engineer prior to issuance of a subdivision-level building permit. Subdivisions are required to incorporate appropriate erosion and sediment control measures.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project may have a significant impact on the environment associated with hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- 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:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    - 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
    - Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and/or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

IMPACTS AND MITIGATION

Impact 3.9-1: The proposed Project has the potential to violate water quality standards or waste discharge requirements or otherwise

substantially degrade surface or groundwater quality. (Less than Significant)

CONSTRUCTION PHASE

Development associated with the proposed Project would involve grading, excavation, removal of vegetation cover, and activities associated with construction activities that could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Each phase of project construction disturbing one acre or more of soil would be required to obtain coverage under the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. The BMPs and overall SWPPP is reviewed by the RWQCB as part of the permitting process. The SWPPP, once approved, is kept on site, and implemented during construction activities and must be made available upon request to representatives of the RWQCB and/or the lead agency. Further, project construction would be required to implement construction site control BMPs in compliance with the municipal NPDES stormwater permit (MS4 Permit). Project construction activities would be required to comply with the urban storm water quality management and discharge control ordinance and other applicable provisions in the City of Clovis Municipal Code, and would incorporate appropriate erosion and sediment control measures per Section 9.110.040 of the City's Municipal Code and adhere to the City's landscape standards designed to reduce runoff and control soil erosion. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements, nor would it otherwise substantially degrade surface water or groundwater quality. Implementation of BMPs during construction activities and compliance with the existing regulatory requirements would reduce potential impacts in this regard to a level that is ***less than significant***.

OPERATIONAL PHASE

The long-term operations of the proposed Project could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious surfaces and would introduce urban uses within the Development Area of the site. Normal activities in these developed areas include the use of various automotive petroleum products and household hazardous materials, including cleansers, paints, fertilizers, and pesticides. Within urban areas, these pollutants are generally called non-point source pollutants. While non-point source pollutants from the Project site already exist, primarily due to road and agricultural runoff, the proposed Project could increase potential pollutants relative to existing conditions. The pollutant levels would vary based on factors such as time between storm events, volume of storm event, type of land uses, and density of people.

As discussed above, the Project site is located within the service area of the FMFCD. FMFCD's stormwater drainage system consists of interconnected surface conveyances, storm drains, detention basins (stormwater basins), pump stations, and outfalls. Stormwater runoff in the City of

Clovis is conveyed through a system of street gutters, underground storm drains, retention/detention basins, pumping stations, and open channels that are maintained by the FMFCD. FMFCD's stormwater drainage system discharges to irrigation canals, creeks, and the San Joaquin River. The system is designed to accept the peak flow rate of runoff from a two-year intensity storm event (a storm that has a 50 percent probability of occurring in any given year). When storm events occur that exceed the two-year intensity, ponding begins to occur in the streets until the pipeline system can remove the water. If the storm is of sufficient intensity to generate more water than the street can store, the water will continue to rise until it reaches a topographic outlet where it can escape down gradient.

The Project would include construction of a new storm drainage system to serve the Master Plan area, which would conform to applicable regulations, standards, and specifications of the SWRCB, the FMFCD, and City of Clovis. This includes, but is not limited to, the municipal NPDES stormwater permit and the City of Clovis Urban Storm Water Quality Management and Discharge Control Ordinance, which would require the implementation of BMPs to control the volume, rate, and potential pollutant load of storm water runoff. Stormwater would be collected in FMFCD's basins that serve the City. Compliance with existing standards and rules, including the implementation of BMPs, would ensure that the proposed Project would have a ***less than significant*** impact relative to this topic.

Impact 3.9-2: The proposed Project has the potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. (Less than Significant)

Groundwater Supplies: The City of Clovis provides utility services to the City, including water. Under the proposed Project, the Master Plan would be annexed into the City and would be served by a new connection to the City's water distribution system. According to the City of Clovis Urban Water Management Plan (UWMP) 2020 Update, the City relies on groundwater extracted from the Kings Subbasin, surface water, and recycled water to meet its water demands.[36] As indicated in Section 3.14, Utilities, pursuant to Water Code section 10910(c)(4), and based on the technical analyses described in the supporting water supply assessment, the total projected water supplies determined to be available for the proposed project during normal, single-dry, and multiple-dry water years during a 20-year projection will meet the projected water demand associated with the proposed Project, in addition to existing and planned future uses. Therefore, the City can serve the proposed Project in addition to existing and planned developments with the existing and planned future water supplies. Thus, the Project would not substantially decrease groundwater supplies that would impede sustainable groundwater management of the basin; refer to Section 3.14, Utilities, regarding water supplies. As such, implementation of the proposed Project would result in a ***less than significant*** impact relative to water supplies.

[36] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

Infiltration/Natural Recharge: As discussed above, existing recharge to the Kings Subbasin within the NKGSA area occurs both naturally from seepage from the San Joaquin River, Kings River, and intermittent streams; and from constructed recharge basins, including seepage in unlined canals, reservoirs, stormwater basins, wastewater effluent ponds, and recharge basins. While natural recharge from percolation of precipitation is considered minor, deep percolation of agricultural and landscape irrigation also makes significant contributions to groundwater recharge. The portion of Big Dry Creek Reservoir Outlet Works Channel that runs through the Project site is considered a surface water feature significant to management of the NKGSA[37] and contributes to recharge of the Subbasin.

Infiltration potential is influenced by several factors, including soil characteristics. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement, significantly reduce infiltration capacity and increase surface water runoff. The soils contained on the Project site have a hydrologic rating ranging from "A," which is indicative of soils having a high infiltration rate (low runoff potential) when thoroughly wet, to "D," which is indicative of soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.[38] Additionally, as indicated in the Geotechnical Investigation, very dense weakly cemented silty sand, sandy silt, clayey sand, and silty sand/clayey sand, locally referred to as "hardpan," were encountered in several of the borings at the Project site.[39] This cementation inhibits the free percolation of surface water into the soil stratum below the hardpan. Therefore, it can be presumed that portions of the Project site do not allow for a high level of groundwater recharge in the existing condition.

The proposed Project would result in new impervious surfaces within the Master Plan area, which could reduce rainwater infiltration and groundwater recharge compared to existing conditions. However, the Project would include open space areas, including landscaped areas and 59 acres of parks, trails, and preserved open space within the Master Plan, which would remain largely pervious. This includes the portion of Big Dry Creek Reservoir Outlet Works Channel that runs through the Project site. Further, areas developed with impervious surfaces would route stormwater into the proposed Project's storm drainage system and to FMFCD facilities designed to retain and infiltrate groundwater, eventually discharging to irrigation canals, creeks, and the San Joaquin River. Therefore, while the proposed Project would result in an increase in the amount of impervious surfaces within the Project site when compared to existing conditions, it is not anticipated that the proposed development would interfere substantially with groundwater recharge.

[37] Provost & Pritchard, North Kings Groundwater Sustainability Agency Groundwater Sustainability Plan (Figure 3-19). Adopted November 2019 (Revised June 2022). Available at: https://northkingsgsa.org/groundwater-sustainability-plan/. Accessed February 2024.

[38] United States Department of Agriculture, National Resource Conservation Service, Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed February 2024.

[39] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

CONCLUSION

A full water supply assessment is provided in Section 3.14, Utilities. The technical analyses shows that the total projected water supplies determined to be available for the proposed Project during Normal, Single Dry, and Multiple Dry years during a 20-year projection will meet the projected water demand associated with the proposed Project, in addition to existing and planned future uses. Additionally, the City intends to expand its surface water supply use, recycled water use, and to continue intentional groundwater recharge efforts to relieve pressure on the groundwater aquifer[40] and ensure sustainable management of the Kings Subbasin, in compliance with the North Kings GSP.

For the reasons mentioned above, the proposed Project would not cause the substantial depletion of groundwater supplies or interfere substantially with groundwater recharge. As such, implementation of the proposed Project would have a ***less than significant*** impact relative to this topic.

Impact 3.9-3: The proposed Project has the potential to 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 result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 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 impede or redirect flood flows. (Less than Significant)

Storm drain facilities are not currently installed in the vacant fields within the Master Plan area. Planned development of the Project site would result in changes to land use and infiltration characteristics and would introduce urban uses within the Development Area of the site. Normal activities in these developed areas include the use of various automotive petroleum products and household hazardous materials, including cleansers, paints, fertilizers, and pesticides, with the potential to degrade receiving waters.

Stormwater runoff in the City of Clovis is conveyed through a system of street gutters, underground storm drains, retention/detention basins, pumping stations, and open channels that are maintained by the FMFCD. The FMFCD operates under the Fresno-Clovis SWQMP, which is assessed on an annual basis to demonstrate compliance with the municipal NPDES stormwater permit (MS4 Permit). The proposed Project would include construction of a new storm drainage system for the Master Plan area. The exact sizing of the underground piping would be engineered in coordination with FMFCD during the preparation of the improvement plans. The proposed storm drainage collection and detention system would be subject to the SWRCB requirements and City of Clovis

[40] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

regulations. This includes, but is not limited to, the municipal NPDES stormwater permit and the City of Clovis Urban Storm Water Quality Management and Discharge Control Ordinance, which would require the implementation of BMPs to control the volume, rate, and potential pollutant load of storm water runoff.

The FMFCD charges a drainage fee that is calculated commensurate with each proposed development's lot coverage calculation. The Project would be required to pay this drainage fee, consistent with Chapter 8.7 of the City's Municipal Code. This calculation cannot be calculated for the Project at this time, given that building plans and lot specific landscaping and site improvements have not been prepared. This very detailed level of design would be performed at either the improvement plan or building plan phase to ensure funding for construction of appropriate local drainage facilities and improvements.

FMFCD reviews all grading and improvement plans for consistency with the FMFCD Storm Drainage and Flood Control Master Plan. This review ensures that grading does not have an adverse impact to major storm conveyance, and to the passage of storm water to the adjacent roadways and existing storm drainage pipelines and inlets. The initial review by FMFCD has indicated that the Project Development Area is located within the FMFCD's adopted Rural Master Plan Drainage Area BY1 and Urban Master Plan Drainage Area BX.[41] The adopted BY1 Rural Master Plan drainage system is designed to serve the existing land uses of open space, range/pasture and rural residential housing densities ranging from 0 to 0.7 dwelling unit/acre. FMFCD has indicated that the existing BY1 planned drainage facilities do not have capacity to serve the proposed Mixed Use Village land use designation within the Project's Master Plan area. As such, FMFCD indicates that the Project would be required to either: make improvements to the existing pipeline system to provide additional capacity; or use some type of onsite permanent peak reducing facility to match the adopted Rural Master Plan flow rates and eliminate any adverse impacts on the downstream drainage system. In addition, for the portion of the Project proposed within the adopted BX Urban Master Plan, FMFCD has determined that the proposed land use under the Project is slightly higher than what was originally planned. As such, the existing drainage facilities located downstream may require changes such as parallel pipes and/or on-site retention to accommodate the increased flow. FMFCD requests that the grading Engineer contact the District as early as possible to review the proposed site grading for verification and acceptance of design prior to preparing a grading plan for the Development Area.

The Project would include construction of a new storm drainage system to serve the Master Plan area, which would be required to conform to applicable regulations, standards, and specifications of the SWRCB, the FMFCD, and the City of Clovis. This includes, but is not limited to, the municipal NPDES stormwater permit and the City of Clovis Urban Storm Water Quality Management and Discharge Control Ordinance, which would require the implementation of BMPs to control the volume, rate, and potential pollutant load of storm water runoff. With the design, construction, and maintenance of flood control improvements in accordance with these requirements, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding, create, or contribute runoff that would exceed the capacity of the existing

[41] Fresno Metropolitan Flood Control District, Fresno Metropolitan Flood Control District Comments for Notice of Preparation of an Environmental Impact Report for Vista Ranch Project. November 17, 2023.

drainage system, or impede or redirect flood flows; impacts would be ***less than significant*** in this regard.

Impact 3.9-4: The proposed Project has the potential to, in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation. (Less than Significant)

As shown on Figure 3.9-2, most of the Project site is located within an area of minimal flood hazard. A portion of the Project site is located within the 500-year flood zone and a portion of the Project site, within the Big Dry Creek Reservoir Outlet Works Channel (a man-made channel), is within the 100-year flood zone. The portion of the Project site within the 100-year flood zone (associated with Big Dry Creek Reservoir Outlet Works Channel) runs in a southwesterly direction through the center of the Development Area. There are no areas of proposed development within the Project site that are designated as having an increased flood risk due to levee, nor are any these areas located within a regulatory floodway.

A tsunami is a series of waves in a water body caused by the displacement of a large volume of water, generally in an ocean or a large lake due to earthquakes, volcanic eruptions, and other underwater explosions. The Project site is approximately 118 miles from the coastline of the Pacific Ocean, which is sufficiently distant to preclude effects from a tsunami.

Seiches are changes or oscillations of water levels within a confined water body. Seiches may be caused by fluctuation in the atmosphere, tidal currents, or earthquakes. Large, inland bodies of water that could generate seiches include retention basins and reservoirs such as the Big Dry Creek Reservoir, located northeast of the Project site. As stated in the Fresno County Multi-Jurisdictional Hazard Mitigation Plan, earthquake-induced seiches are not considered a risk in Fresno County.[42] Additionally, as stated in the General Plan EIR, the Big Dry Creek Reservoir is generally not at full capacity, and the water level changes throughout the year due to the amount of rainfall received.[43] While the Big Dry Creek Reservoir has a maximum capacity of 30,200 AF, only 6,126 AF or 20 percent of the total capacity was used during the record-breaking storms of December 2022, and January/February 2023.[44] Given the low risk of earthquake-induced seiche and the low water levels of the dam, risks of seiches to the Project site would be low.

The Project site is located within dam failure inundation areas associated with the Big Dry Creek Dam, as shown in Figure 3.9-3. The Big Dry Creek Dam is under the oversight of the DSOD. Regular inspection by DSOD and maintenance by the dam owners ensure that dams are kept in safe operating conditions. The proposed Project would not result in actions that could result in a higher likelihood of dam failure at Big Dry Creek Dam. There will always be a remote chance of dam failure that results in flooding within dam inundation areas, including the Project site. However, with

[42] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.
[43] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-09-Hydrology-and-Water-Quality.pdf. Accessed February 2024.
[44] Fresno Metropolitan Flood Control District, Big Dry Creek Dam. Available at: https://fresnometroh2o.com/dams/big-dry-creek-dam/. Accessed February 2024.

oversight and ongoing monitoring performed by the DSOD, dam failure is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

The proposed Project is not anticipated to risk release of pollutants due to project inundation, including flooding because of the failure of a levee or dam, seiche, or tsunami. This impact is considered ***less than significant***.

Impact 3.9-5: The proposed Project has the potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant)

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins and Tulare Lake Basin (Basin Plans) and the North Kings Groundwater Sustainability Plan (GSP) are the guiding documents for water quality and sustainable groundwater management in the Project area. Project consistency with these plans is described in detail below.

WATER QUALITY CONTROL PLAN

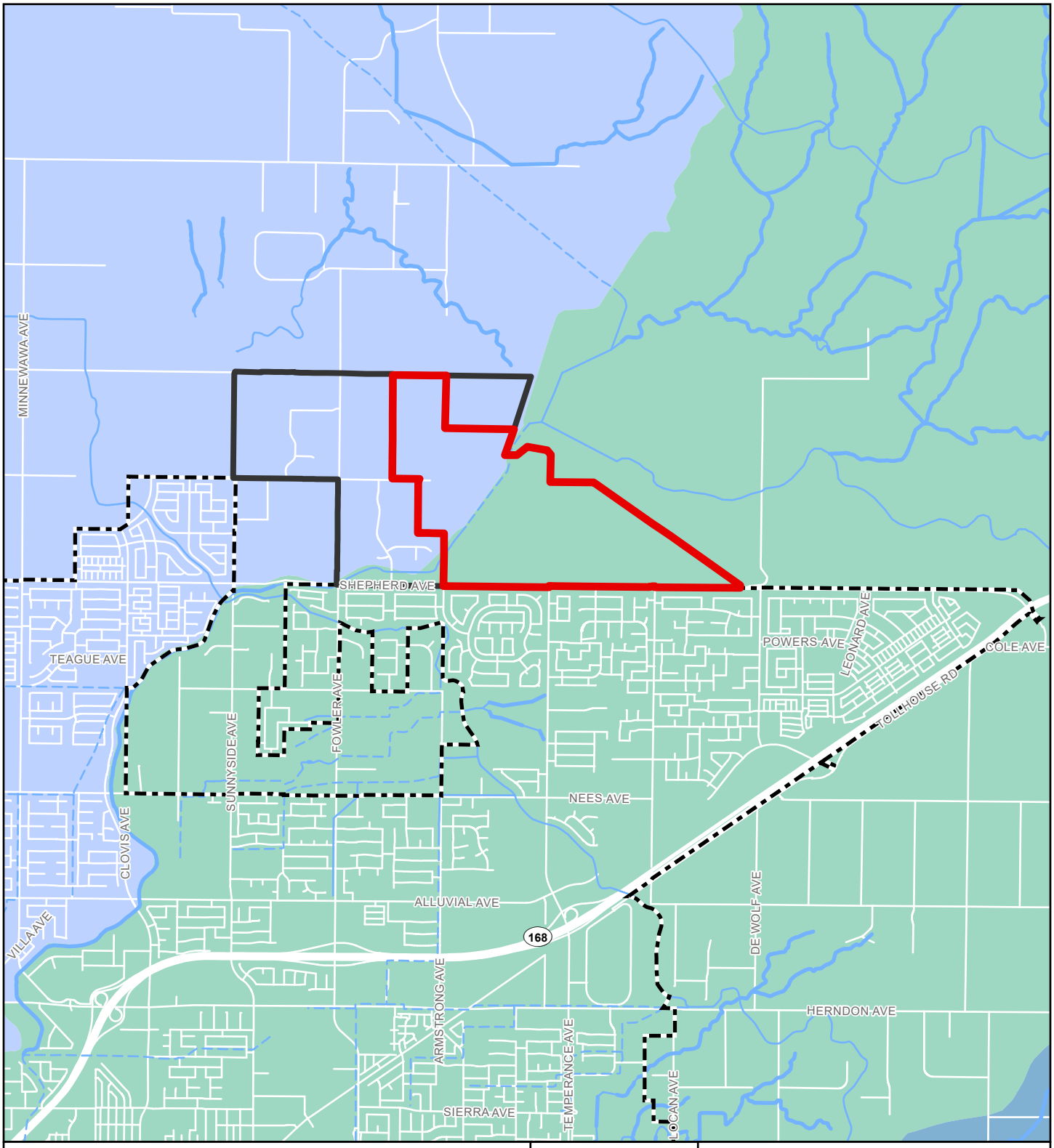
The local water quality control plans (Basin Plans) are maintained by the Central Valley RWQCB. The Basin Plans specify the State's water quality standards (i.e., beneficial uses, water quality objectives, and antidegradation policy) and serve as the basis for the RWQCB's regulatory programs. When permittees and projects comply with the provisions of applicable NPDES permits and water quality permitting, they are consistent with local Basin Plans. As described under Impact 3.9-1, the Project would be required to prepare a SWPPP and monitoring plan, and implement BMPs in compliance with the municipal NPDES stormwater permit (MS4 Permit). The Project would also be subject to applicable City of Clovis water quality regulations, including, but not limited to, the City's Urban Storm Water Quality Management and Discharge Control Ordinance. Compliance with these applicable regulations would ensure Project consistency with the Basin Plan.

SUSTAINABLE GROUNDWATER MANAGEMENT PLAN

As described above, the Kings Subbasin was designated a high-priority basin. In compliance with SGMA, the NKGSA adopted the North Kings GSP and submits an annual report to the DWR detailing groundwater conditions for the Subbasin and GSP implementation status for the prior year. The North Kings GSP, in coordination with the other six GSAs in the Kings Subbasin, guides sustainable management of the Subbasin and achieves compliance with SGMA. The proposed Project would be subject to compliance with the GSP. As discussed in Impact 3.9-2, the Project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the Subbasin. Additionally, as described under Impact 3.9-1, the Project would be required to implement BMPS to reduce stormwater quality impacts that could impact water quality within the Subbasin. Compliance with applicable regulations would ensure Project consistency with the North Kings GSP.

CONCLUSION

Overall, implementation of the proposed Project and adherence to existing regulatory requirements would have a ***less than significant*** impact related to conflicts with the Basin Plan and the Groundwater Sustainability Plan.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits

Waterways

- Connector, Pipeline, or Artificial Path
- Canal or Ditch
- Stream River

Watersheds

- Dog Creek-Fish Slough
- Dry Creek
- James Bypass

N

0 1,000 2,000

US Feet

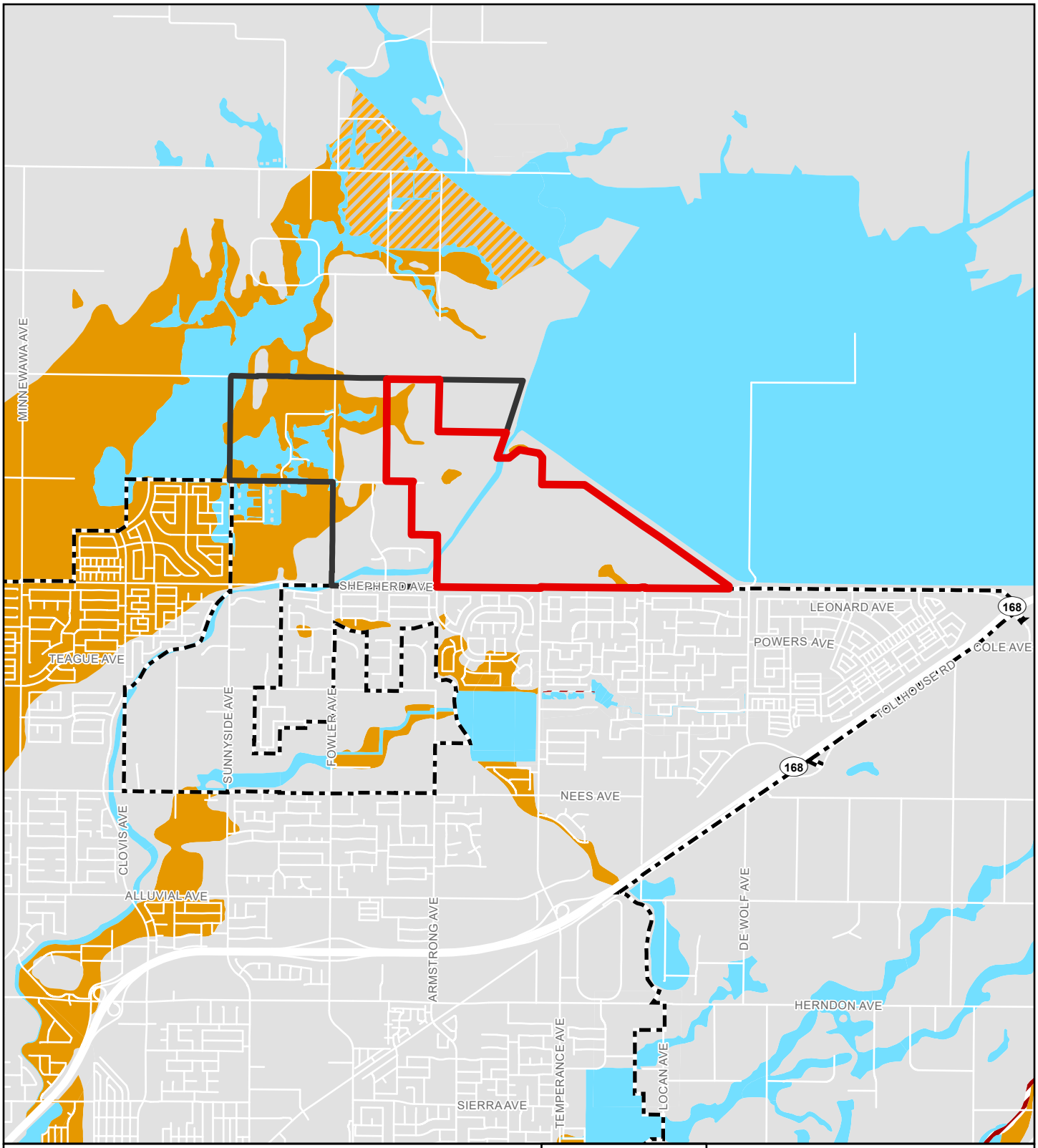
Sources: NHD; Fresno County GIS. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 3.9-1. Watershed Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits

FEMA Designation

- 100-Year Flood Zone
- 500-Year Flood Zone
- Regulatory Floodway
- Area of Minimal Flood Hazard
- Area with Reduced Flood Risk due to Levee

N

0 1,000 2,000

US Feet

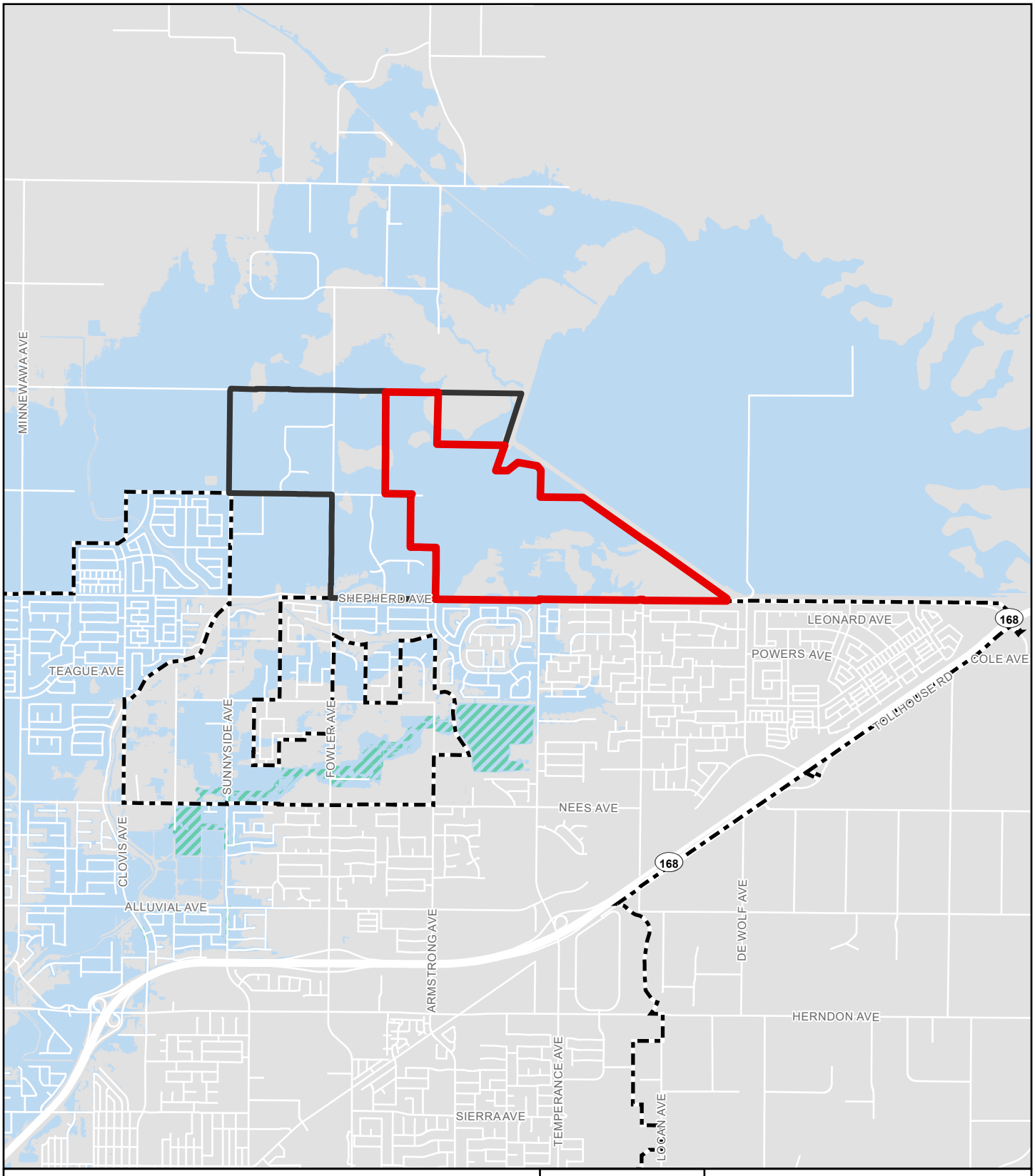
Sources: Fresno County GIS; FEMA. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 3.9-2. FEMA Floodplain Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND

- Master Plan Area
- SOI Expansion Area
- Clovis City Limits
- Alluvial Drain Detention Dam Inundation Area
- Big Dry Creek Dam Inundation Area

N

0 1,000 2,000

US Feet

Sources: Fresno County GIS; DWR. Map date: January 26, 2024.

SOI Expansion Vista Ranch

Figure 3.9-3. Dam Inundation Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

This section describes the existing land uses on the Project site and in the surrounding area, describes the applicable land use regulations, and evaluates the environmental effects of implementation of the proposed Project related to land use, population, and housing. Information in this section is based on information provided in the proposed Project materials and the following reference documents:

- *2014 Clovis General Plan (City of Clovis, 2014);*
- *2014 Clovis General Plan Program Environmental Impact Report (City of Clovis, 2014);*
- *2000 Fresno County General Plan (City of Clovis, 2000);*
- *2018 Fresno County Zoning Ordinance (City of Clovis, 2018);*
- *City of Clovis Municipal Code, Title 9 – Development Code (City of Clovis, 2022).*

There were no comments received during the public review period or scoping meetings for the Notice of Preparation regarding this topic.

3.10.1 ENVIRONMENTAL SETTING

EXISTING PHYSICAL ENVIRONMENT

The Vista Ranch Project (Project) site is located directly north of the City of Clovis limit line, in unincorporated Fresno County. The Project site consists of approximately 952 acres located within the City's Planning Area and is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues.

The City of Clovis is in the central portion of Fresno County, approximately 6.5 miles northeast of the City of Fresno downtown area. Clovis is surrounded by portions of unincorporated Fresno County to the north, east, and south and by the City of Fresno to the west and southwest.

Project Site

The Project site includes several distinct planning boundaries. The following terms are used throughout this document to describe planning area boundaries within the Project site:

- **Project Area:** Includes the whole of the Project site (approximately 952 acres), all of which is currently located in the City's Planning Area and would be incorporated into the City's sphere of influence (SOI). The Project area includes (1) the approximately 507-acre Vista Ranch Master Plan and (2) the approximately 445-acre Non-Development Area, both of which are described below.

- **Vista Ranch Master Plan (Master Plan):** Includes approximately 507 acres located entirely within the Project Area. The Master Plan contemplates the construction of up to 3,286 residential units, approximately 16 acres of commercial/mixed-uses, approximately 19 acres for an elementary school site, approximately 32 acres for mini-storage, and approximately 59 acres of parks, trails, and preserved open space. The Master Plan is divided into two distinct planning areas, as further defined below: (1) MPArea 1, an approximately 368-acre

area proposed for immediate development, and (2) MPArea 2, the remaining approximately 139 acres that is anticipated for future development.

- **MPArea 1 (Development Area):** MPArea 1 includes approximately 368 acres proposed to be developed by Wilson Premier Homes, Inc. Most of the Development Area has been planned for urban uses and is included in the area designated as the Northeast Urban Center in the City's 1993 General Plan and subsequent General Plan updates. Consistent with that vision, the approximately 368-acre Development Area would consist of a mix of urban uses, including 2,500 to 2,718 residential units, non-residential uses for future gateway neighborhood commercial uses and community recreational facilities up to 133,000 square feet in size, and approximately 43 acres of parks, trails, and open space.
- **MPArea 2:** MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan. MPArea 2 also plans for a mix of urban uses as part of the Northeast Urban Center under the City's 1993 General Plan and subsequent General Plan updates.
- **Non-Development Area:** The Non-Development Area includes approximately 445 acres that have not requested, nor would receive, any entitlements other than to be included in the SOI expansion.

As described in Chapter 2.0, *Project Description*, of this EIR, the Project site currently consists of 139 Assessors Parcels, comprised of a combination of fallow and grazing land, several rural residences, offices and Contractor's Corp Yard and small tree nursery. The proposed Master Plan portion of the Project site is bifurcated by the Big Dry Creek Reservoir Outlet Works Channel.

Figure 2.0-4 shows aerial imagery of the existing site uses within the Project site.

Surrounding Land Uses

The Project site is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land and open space land uses. Uses immediately east of the Project site consist of the Big Dry Creek Reservoir, and an existing earthen dam, owned and operated by the Fresno Metropolitan Flood Control District. Uses immediately south of the Project site are primarily single-family residential, as the southern side of East Shepherd Avenue is already improved with single-family residences including a planned community. Uses immediately west and north of the Project site are primarily rural residential on larger lots and fallow or grazing properties. The northern side of East Shepherd Avenue continues in a largely unimproved manner until the intersection with Armstrong Avenue, where larger single-family rural residences on larger lots have been constructed, immediately along the western boundary of the Development Area.

DEMOGRAPHICS

Population Trends

The City experienced a population increase from 2000 to 2010, from 68,516 to 95,631, resulting in an increase of 27,115 persons, or approximately 39.6 percent, as shown in Table 3.10-1. During the

period from 2010 to 2023, population continued to increase in the City, resulting in a total estimated population of 124,523 in 2023, or an increase of approximately 30.2 percent.[1,2]

TABLE 3.10-1: POPULATION GROWTH

YEAR	POPULATION	CHANGE	PERCENT CHANGE
2000	68,516	--	--
2010	95,631	27,115	39.6%
2023	124,523	28,892	30.2%

SOURCE: CALIFORNIA DEPARTMENT OF FINANCE, 2024.

Housing Stock

Table 3.10-2 summarizes the growth of the City's housing stock between 2000 and 2023. The number of housing units increased from 25,265 in 2000 to 35,306 in 2010, representing an increase of 10,041 housing units, or approximately 39.7 percent. During the period from 2010 to 2023, the number of housing units increased by 11,231, for a total of 46,537, or approximately 31.8 percent.[3,4,5]

TABLE 3.10-2: HOUSING UNIT GROWTH

YEAR	HOUSING UNITS	CHANGE	PERCENT CHANGE
2000	25,265	--	--
2010	35,306	10,041	39.7%
2023	46,537	11,231	31.8%

SOURCES: CALIFORNIA DEPARTMENT OF FINANCE, 2024.

[1] California Department of Finance, E-4 Population Estimates for Cities, Counties, and the State, 2001-2010, with 2000 & 2010 Census Counts. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e4-2000-2010/. Accessed January 2024.

[2] California Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2021-2023 with 2020 Censes Benchmark. Available at: https://dof.ca.gov/forecasting/demographics/estimates/e-4-population-estimates-for-cities-counties-and-the-state-2021-2023-with-2020-census-benchmark/. Accessed January 2024.

[3] California Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties and the State, 2000-2010. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e8-2000-2010/. Accessed January 2024.

[4] California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2020/. Accessed January 2024.

[5] California Department of Finance, Estimates-E1, Population and Housing Estimates for Cities, Counties, and the State – January 1, 2022 and 2023. https://dof.ca.gov/forecasting/demographics/estimates-e1/. Accessed January 2024.

Persons Per Dwelling Unit

According to the most recent California Department of Finance estimate, the average number of persons residing in a dwelling unit in the City of Clovis in 2023 is 2.84.[6]

3.10.2 REGULATORY SETTING

STATE

California Government Code

California Government Code (CGC) § 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. A general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a jurisdiction and of any land outside its boundaries that, in the jurisdiction's judgment, bears relation to its planning. The general plan addresses a broad range of topics, including, at a minimum, land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the jurisdiction's vision for the area. The general plan is a long-range document that typically addresses the physical character of an area over a 20-year period. Although a general plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals.[7]

The State Zoning Law (CGC § 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific district, are required to be consistent with the general plan and any applicable specific plans.[8] When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure the land uses designated in the general plan would also be allowable by the zoning ordinance (CGC § 65860, subd. [c]).[9]

[6] California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023. Available at: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. Accessed January 2024.

[7] California Legislative Information, California Government Code Section 65300. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=7.&part=&chapter=3.&article=5. Accessed January 2024.

[8] California Legislative Information, California Government Code Section 65800. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65800.&lawCode=GOV. Accessed January 2024.

[9] California Legislative Information, California Government Code Section 65850. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65860.&lawCode=GOV. Accessed January 2024.

State of California Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000

The Cortese-Knox-Hertzberg Local Government Reorganization Act establishes procedures for local government changes of organization, including city incorporations, annexations to a city or special district, and city and special district consolidations. In approving an annexation, the Local Agency Formation Commission (LAFCo) will consider the following factors:[10]

- Population and population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; and the likelihood of significant growth in the area and in adjacent incorporated and unincorporated areas during the next ten years.
- The need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; and the probable effect of the proposed incorporation, formation, annexation, exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas.
- The effect of the proposed action and of alternative actions on adjacent areas, on mutual social and economic interests, and on the local government structure of the county.
- The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, and efficient patterns of urban development, and the policies and priorities set forth in Government Code § 56377.
- The effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Government Code § 56016.
- The definiteness and certainty of the boundaries of the territory, nonconformance of proposed boundaries with lines of assessment or ownership, creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.
- Consistency with city or county general and specific plans.
- The sphere of influence of any local agency that may be applicable to the proposal being reviewed.
- The comments of any affected local agency.
- The ability of the newly formed or receiving entity to provide the services that are the subject of the application to the area, including the sufficiency of revenues for those services following the proposed boundary change.
- Timely availability of water supplies adequate for projected needs as specified in Government Code § 65352.5.

[10] California State Assembly Committee on Local Government, Guide to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. December 2023. Available at: https://calafco.org/sites/default/files/resources/CKH-Guides/CKH%20GUIDE%20-%202023%20-%20linked.pdf. Accessed January 2024.

- The extent to which the proposal will affect a city or cities and the county in achieving their respective fair shares of the regional housing needs, as determined by the appropriate council of governments consistent with Housing Element laws.
- Any information or comments from lawmakers.
- Any information relating to existing land use designations.

In addition to the above factors, LAFCo may also consider any resolution raising objections to the action that may be filed by an affected agency; and any other matters which the commission deems material.

Senate Bill 330

Senate Bill (SB) 330 "The Housing Crisis Act of 2019" is a statewide bill intended to reduce the time it takes to approve housing developments in California. SB 330 would declare a statewide housing emergency to be in effect until January 1, 2030. During that period, cities and counties found to have high rents and low rental vacancy rates would:[11]

- Be prohibited from reducing housing densities, increasing development fees, or taking a range of other actions affecting housing development (both for-sale and rental);
- Have any such actions taken since January 1, 2018 declared null and void;
- Be prohibited from imposing fees on new units that are deed restricted for families earning less than 80 percent of the area median income;
- Be prohibited from enforcing requirements that new developments include parking;
- Be required to process housing development applications under the general plan and zoning ordinance in effect at the time the application is deemed complete.

Other provisions of SB 330 would apply to all jurisdictions not only those with high rents and low vacancy rates. These include requiring cities and counties to process housing development applications under the general plan and zoning ordinance in effect at the time the application is deemed complete, a ban on holding more than three de novo public hearings on a project, and a requirement that cities and counties post all development standards online. The bill would also call for the State Department of Housing and Community Development to update building standards for "occupied substandard buildings."

LOCAL

Fresno Council of Governments

The Fresno Council of Governments (FCOG) is an association of local governments from cities within Fresno County. The member agencies include Cities of Clovis, Coalinga, Firebaugh, Fowler, Fresno,

[11] California Legislative Information. Senate Bill No. 330. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB330. Accessed January 2024.

Huron, Kerman, Kingsburg, Mendota, Orange Cove, Parlier, Reedley, San Joaquin, Sanger, Selma, and County of Fresno.[12]

REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

FCOG is responsible for the preparation of, and updates to, the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the region. The RTP/SCS provides a 25-year transportation vision and strategies for air emissions reduction. The 2022 RTP/SCS was adopted by the FCOG Policy Board July 28,2022.[13] The 2022 RTP/SCS marks the first edition since the COVID-19 pandemic that began in early 2020 and upended many traditional planning processes and assumptions. These range from the potential for greater telecommuting options and vehicle miles traveled (VMT) savings to new strategies for public participation.[14]

The 2022 RTP/SCS is a long-range plan for transportation improvements in the region. The RTP/SCS identifies existing and future transportation related needs, while considering all modes of travel, analyzing alternative solutions, and identifying anticipated available funding for the over 3,000 projects and multiple programs. The plan is based on projections for growth in population, housing, and jobs. FCOG determines the regional growth projections by evaluating baseline data (existing housing units and employees, jobs/housing ratio, and percent of regional growth share for housing units and employees), historic reference data (based upon five- and ten-year residential building permit averages and historic county-level employment statistics), capacity data (General Plan data for each jurisdiction), and current RTP data about assumptions used in the most recent RTP/SCS. FCOG staff then meets with each jurisdiction to discuss and incorporate more subjective considerations about planned growth for each area. Finally, FCOG makes a regional growth forecast for new homes and new jobs, based upon an economic analysis provided by a recognized expert in order to estimate regional growth potential based on market analysis and related economic data. This growth forecast is then incorporated into the RTP/SCS.

REGIONAL HOUSING NEEDS PLAN

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The fair share is known as the Regional Housing Needs Allocation (RHNA). FCOG is the lead agency for developing the RHNA that includes Fresno County and the City of Clovis. FCOG's Policy Board adopted the 6th Cycle Final RHNA Plan for the Fresno County region, following a public hearing, in November 2022; as such, local jurisdictions in Fresno County must now

[12] Fresno Council of Governments, About Fresno COG. Available at: https://fresnocog.org/about-cog/. Accessed January 2024.

[13] Fresno Council of Governments, Plan Fresno, 2022 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://www.planfresno.com/sustainable-communities-strategies-fall-outreach/. Accessed January 2024.

[14] Fresno Council of Governments, Plan Fresno, 2022 Regional Transportation Plan/Sustainable Communities Strategy, Chapter 1, About the Plan. https://www.planfresno.com/planfresno/uploads/2022/06/Chapter-1-About-the-Plan-Final-Draft.pdf. Accessed January 2024.

update the Housing Element of its general plan to accommodate its RHNA numbers. The 6th Cycle RHNA covers the housing projection period from 2023-2031.[15]

If a jurisdiction failed to make adequate sites available to accommodate the RHNA in the previous planning period, AB 1233 (CGC § 65584.09) requires the jurisdiction to identify and, if necessary, rezone sites in the first year of the current planning period to address the unaccommodated lower-income RHNA from the previous planning period. This requirement is in addition to the requirement to identify other specific sites to accommodate the RHNA for the current planning period. The City may not count capacity on the same sites for both planning periods.[16]

Fresno Local Agency Formation Commission

The Fresno LAFCo is responsible for coordinating orderly reorganization to local jurisdictional boundaries, including annexations. Any annexation of the Project site to the City is subject to LAFCo approval, and LAFCo will review proposed annexations for consistency with LAFCo's Annexation Policies and Procedures.

Fresno LAFCo has adopted Policies and Procedures for Annexation and Detachment to and from all agencies within their jurisdiction. Fresno LAFCo policy (102-01) states that "within the sphere of influence each agency should implement an orderly, phased annexation program. A proposal should not be approved solely because the area falls within the sphere of influence of an agency." The City of Clovis follows the Policies and Procedures for Annexation and Detachment when annexing land into the City. LAFCo recommends that each local agency fulfill this policy through the exercise of one or more of the following basic principles and actions:[17]

1. The annexation program is consistent with LAFCo's Sphere of influence (SOI) for the City.

Suggested actions:

- City and county shall reach agreement on development standards and planning and zoning requirements within the sphere to ensure that development within the sphere occurs in a manner that reflects the concerns of the affected city and is accomplished in a manner that promotes the logical and orderly development of areas within the sphere (CGC § 56425).

[15] Fresno Council of Governments, Fresno County Regional Housing Needs Allocation Plan. Available at: https://www.fresnocog.org/project/fresno-county-regional-housing-needs-allocation-plan/. Accessed January 2024.

[16] California Legislative Information. California Government Code 65584.09. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65584.09&lawCode=GOV. Accessed January 2024.

[17] Fresno LAFCo Annexation Program Guidelines. Available at: https://www.fresnolafco.org/files/83ec3cf92/Attachment+-+MAP.pdf#:~:text=It%20is%20Fresno%20LAFCo%20policy%20%28102-01%29%20that%20"within,within%20the%20sphere%20of%20influence%20of%20an%20agency." Accessed January 2024.

- City responds to a request to extend service outside of its city limits and SOIs in consultation with CGC § 56133 and Fresno LAFCo policy.

2. The annexation program clearly implements the city's general plan.

Suggested actions:

- City annexation applications shall describe how the proposal implements the City's General Plan and support these statements with information from other official sources, such as the annual budget, capital improvement plan, and so forth.
- A prezoning ordinance shall not be encumbered with extraneous conditions that preclude the ordinance's effective date by the time of LAFCo hearing on the annexation.

3. The annexation program emphasizes the use of cities' resolution of application versus property owner/registered voter petitions.

Suggested action:

- For the City to consider opposing property owner petition-initiated reorganizations as these would not have proceeded through the process of City development review and approval, which is an important step in the management of a city's general plan.

4. The annexation program supports orderly growth by identifying areas to be annexed, general time frames for growth, and a plan for extension of services to these areas.

Suggested actions:

- Capital improvement plan and/or facilities plans include all lands within the SOI;
- Development impact fees that fund the extension of services are established and maintained;
- Impacts to service delivery are assessed in the City's EIR or project-specific CEQA documents and appropriately-scaled mitigation is approved and implemented.
- The City coordinates its public policy documents in support of the annexation program.

5. The annexation program anticipates changes of organization of existing service districts and service areas in the SOI or adjacent to the SOI.

Suggested action:

- The Program should describe the transition of services that will occur when the city annexes/detaches (CID, NCFPD, FCFPD, KRCD, etc.)[18]; inversely, the document describes the status of or continuation of services when annexations do not result in detachment (FID, FMFCD, etc.)[19].

6. The annexation program anticipates the location of Disadvantaged Unincorporated Communities within a City's sphere of influence.

[18] CID = Consolidated Irrigation District; NCFPD = North Central Fire Protection District; FCFPD = Fresno County Fire Protection District; and KRCD = Kern River Conservation District.

[19] FID = Fresno Irrigation District; and FMFCD = Fresno Metropolitan Flood Control District.

Suggested action:

- Cities should become proficient in implementing their responsibilities under Senate Bill 244, should review Fresno LAFCo DUC policy and review Senate Bill 244 Technical Advisory.[20]

7. The annexation program informs citizens in annexation areas of their rights, benefits, and changes that will occur on annexation.

Suggested actions:

- City to establish and maintain on its website a description of the information above, how citizens can engage the process, how the City engages citizens and stakeholders and other information related to annexation. This information should include a description of the SOI, protest processes, and how LAFCo is involved.
- For those portions of a City's SOI that contain many rural residential parcels that are planned for urban uses, the city is strongly encouraged to develop a long-term plan to annex and serve these areas.

8. The annexation program will be coordinated with LAFCo's Municipal Services Review (MSR) for the City.

Suggested action:

- City applications should include an assessment of current MSR determinations and recommendations.

9. The annexation program is managed by an assigned and responsible City staff member.

Suggested action:

- City identifies a staff member to serve as a genuine point of contact with LAFCo, that is, a staff member responsible and accountable for managing applications, knowledgeable of the project and of LAFCo's process, and empowered to facilitate the city's annexation program.

10. City entitlement analysis is integrated with LAFCo policies.

Suggested action:

- Local agencies, including Fresno County, are strongly advised to include Fresno LAFCo in their initial request for comments.
- When initial planning applications that will eventually require annexation are submitted to cities, they are encouraged to submit a pre-application to LAFCo, so that LAFCo can track the project at its beginning and provide comments that would facilitate annexation in time for these to be considered in a timely and efficient manner.
- To provide city staff with LAFCo's comments that ultimately should be considered once the project is through the city.

[20] DUC = Disadvantaged Unincorporated Communities.

City of Clovis General Plan

As noted above, general plans are prepared under a mandate from the State of California, which requires each city and county to prepare and adopt a comprehensive, long-term general plan for its jurisdiction and any adjacent related lands. State law requires general plans to address seven mandated components: circulation, conservation, housing, land use, noise, open space, and safety. In addition to those components required by State law, the Clovis General Plan also contains optional elements, including Environmental Safety, Economic Development, Public Facilities and Services, and Air Quality.

CITY OF CLOVIS GENERAL PLAN

The City of Clovis General Plan includes an introduction and eight separate chapters that establish goals and policies for each given set of topics. The chapters cover all the topics required by CGC § 65302, as well as topics of particular interest to Clovis. The General Plan structure is summarized as follows:

- **Land Use Element:** establishes the general distribution, location, and extent of future land uses and provides standards for the intensity and density of the built environment. It establishes policies to guide land use, development, and redevelopment.
- **Economic Development Element:** links land use and development to economic growth, jobs and income, and municipal revenues and expenditures.
- **Circulation Element:** determines the transportation system necessary to accommodate the planned land use and development.
- **Public Facilities and Services Element:** defines the nature and types of public facilities, services, and activities necessary to maintain a high quality of life in Clovis.
- **Environmental Safety Element:** focuses the protection of the community from environmental and man-made hazards.
- **Open Space and Conservation Element:** seeks to protect and preserve open space, productive agricultural areas, and environmental resources. This element also establishes goals for the maintenance and provision of new and existing parks.
- **Air Quality Element:** addresses the role of local land use planning in improving regional air quality.
- **Housing Element:** serves as the City's principal guide for housing programs and strategies to address housing needs. State law (CGC § 65580-65589.8) requires that every City and County in California adopt a Housing Element as a part of its General Plan. The Housing Element must be updated every eight years and is subject to detailed statutory requirements and mandatory review by the California Department of Housing and Community Development (HCD).

General Plan Land Use Map

The General Plan Land Use Map portrays the ultimate uses of land in the City of Clovis through land use designations; however, the Project site is currently located in Fresno County, and as such, all parcels within the Project site currently have Fresno County land use and zoning designations. Most

of the Project site is located within Clovis General Plan Focus Area 13. A focus area assignment complements a property's General Plan land use designation and may expand permissible uses, introduce new policy requirements, augment development standards, or simply call attention to a complex property. The Land Use Map designates the Project site as Focus Area 13. Figure 2.0-5 in Chapter 2.0 depicts the existing Clovis General Plan land use designations for the Project site and the surrounding areas. General Plan land use designations in Focus Area 13 include Low Density Residential (L), Medium Density Residential (M), Medium High Density Residential (MH), Mixed Use Village (MU-V), Open Space (OS), Park (PK), and School (S).[21]

Clovis General Plan Focus Area 13: The primary land use for Focus Area 13 is Urban Center, as indicated by the Clovis General Plan. A Master Plan is required, and development should give special consideration to buffering of residential adjacent to the focus area and design features for the focus area as a gateway to Clovis.[22]

General Plan Policies

The following policies of the General Plan related to land use, population and housing are applicable to the proposed Project:

Land Use Element

- **Land Use Policy 3.2: Individual development project.** When Projects are proposed in an Urban Center, require a conceptual master plan to show how a proposed project could relate to possible future development of adjacent and nearby properties. The conceptual master plan should generally cover about 160 acres or the adjacent area bounded by major arterials, canals, or other major geographical features. The conceptual master plan should address:
    A. Compliance with the comprehensive design document (see Policy 3.1)
    B. A consistent design theme
    C. A mix of housing types
    D. Adequate supply and distribution of neighborhood parks
    E. Safe and direct pedestrian and bicycle linkages between residential areas and school sites, parks, and community activity centers
- **Land Use Policy 3.5: Fiscal sustainability.** The City shall require establishment of community facility districts, lighting and landscaping maintenance districts, special districts, and other special funding or financing tools in conjunction with or as a condition of development, building or permit approval, or annexation or sphere of influence amendments when necessary to ensure that new development is fiscally neutral or beneficial.

[21] Clovis General Plan Land Use Designations, October 2023. Available at: https://cityofclovis.com/wp-content/uploads/2023/11/20231018-Official-General-Plan-Map.pdf. Accessed May 2024.

[22] Clovis General Plan. August 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed January 2024.

- **Land Use Policy 3.6: Mix of housing types and uses.** Development is encouraged to provide a mix of housing types, unit sizes, and densities at the block level. To accomplish this, individual projects five acres or larger may be developed at densities equivalent to one designation higher or lower than the assigned designation, provided that the density across an individual project remains consistent with the General Plan.
- **Land Use Policy 3.7: Urban Village neighborhood concept.** Residential developments in Urban Centers must contribute to and become part of a neighborhood by incorporating a central park feature, a school complex, a hierarchy of streets, pedestrian pathways, or other neighborhood amenities. Higher density residential should be next to lands designated Mixed Use Village. The City may also require the application of the urban village neighborhood concept in areas outside of an Urban Center.
- **Land Use Policy 3.8: Land use compatibility.** Within Urban Center, new development that is immediately adjacent to properties designated for rural residential and agricultural uses shall bear the major responsibility of achieving land use compatibility and buffering.
- **Land Use Policy 3.9: Connected development.** New development in Urban Centers must fully improve roadway, pedestrian and bicycle systems within and adjacent to the proposed project and connect to existing urbanized development.
- **Land Use Policy 4.1: Clovis leadership.** The City shall take a leadership role in the land use planning for the sphere of influence and entire Clovis General Plan Area.
- **Land Use Policy 4.3: Future environmental clearance.** The City shall monitor development and plan for additional environmental clearance as development levels approach those evaluated in the General Plan EIR.
- **Land Use Policy 5.1: Housing variety in developments.** The Clovis General Plan has been planned to provide a variety of housing product types suitable to each stage of a person's life. Each development should contribute to a diversity of housing sizes and types within the standards appropriate to the land use designation. This policy does not apply to projects smaller than five acres.
- **Land Use Policy 6.1: Amendment criteria.** The City Council may approve amendments to the General Plan when the City Council is satisfied that the following conditions are met:
    A. The proposed change is and will be fiscally neutral or positive.
    B. The proposed change can be adequately served by public facilities and would not negatively impact service on existing development or the ability to service future development.
    C. The proposed change is consistent with the Urban Village Neighborhood Concept when within an Urban Center.
    D. General Plan amendments proposed a change from industrial, mixed-use business campus, or office (employment generating) land use designations to non-employment-generating land use designation shall be accompanied by an analysis of the potential impacts on the change or loss in the types of jobs.
    E. This policy does not apply to:
        i. County designations within the Clovis Planning Area or changes made by the City Council outside of the sphere boundary to reflect changes made by the County of Fresno.

ii. Changes initiated by public agencies (such as school districts, flood control) for use by public agencies.
iii. Changes initiated by the city within a specific plan.

- **Land Use Policy 6.2: Smart Growth.** The City is committed to the following smart growth goals.
    A. Create a range of housing opportunities and choices
    B. Create walkable neighborhoods
    C. Encourage community and stakeholder collaboration
    D. Foster distinctive, attractive communities with a strong sense of place
    E. Make development conditions predictable, fair and cost effective
    F. Mix land uses
    G. Preserve open space, farmland, natural beauty, and critical environmental areas
    H. Provide a variety of transportation choices
    I. Strengthen and direct development toward existing communities
    J. Take advantage of compact building design
    K. Enhance the economic vitality of the region
    L. Support actions that encourage environmental resource management

Circulation Element

- **Circulation Policy 1.1: Multimodal network.** The city shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.
- **Circulation Policy 1.2: Transportation decisions.** Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists.
- **Circulation Policy 1.3: Age and mobility.** The design of roadways shall consider all potential users, including children, seniors, and persons with disabilities.
- **Circulation Policy 1.5: Neighborhood connectivity.** The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses).
- **Circulation Policy 1.6: Internal circulation.** New development shall utilize a grid or modified-grid street pattern. Areas designated for residential and mixed-use village developments should feature short block lengths of 200 to 600 feet.
- **Circulation Policy 1.8: Network completion.** New development shall complete the extension of stub streets planned to connect to adjacent streets, where appropriate.
- **Circulation Policy 2.3: Fair share costs.** New development shall pay its fair share of the cost for circulation improvements in accordance with the City's traffic fee mitigation program.
- **Circulation Policy 3.1: Traffic calming.** Employ traffic-calming measures in new developments and existing neighborhoods to control traffic speeds and maintain safety.
- **Circulation Policy 3.12: Residential orientation.** Where feasible, residential development should face local and collector streets to increase visibility and safety of travelers along the streets, and encourage pedestrian and bicycle access.

- **Circulation Policy 4.1: Bike and transit backbone.** Bike and transit backbone. The bicycle and transit system should connect Shaw Avenue, Old Town, the Medical Center/R&T Park, and the three Urban Centers.
- **Circulation Policy 5.1: Complete street amenities.** Upgrade existing streets and design new streets to include complete street amenities, prioritizing improvements to bicycle and pedestrian connectivity or safety, consistent with the Bicycle Transportation Master Plan and other master plans.
- **Circulation Policy 5.2: Development-funded facilities.** Require development to fund and construct facilities as shown in the Bicycle Transportation Plan when facilities are in or adjacent to the development.
- **Circulation Policy 5.3: Pathways.** Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger.
- **Circulation Policy 5.5: Pedestrian access.** Require sidewalks, paths, and crosswalks to provide access to schools, parks, and other activity centers and to provide general pedestrian connectivity throughout the city.

Economic Development Element

- **Economic Development Policy 1.2: Jobs-housing ratio.** Improve the City's job-housing ratio by promoting growth in jobs suited to the skills and education of current and future residents with the objective of the number of jobs in Clovis being equal to the number of employed residents.
- **Economic Development Policy 1.5: Workforce housing.** Collaborate with residents, housing providers, and the development community to provide housing opportunities for the local workforce.
- **Economic Development Policy 1.8: Infrastructure investments.** Invest in infrastructure expansions and upgrades to ensure that developable land remains available in the mixed-use business campus areas; invest in infrastructure upgrades to ensure that existing office and industrial areas are able to support expansions and redevelopment in response to changing market conditions.
- **Economic Development Policy 3.1: Quality of life.** Promote retail development with the primary objective of improving the quality of life by providing a full range of goods and services in Clovis.
- **Economic Development Policy 3.2: Convenience goods and services.** Encourace business providing convenience goods and services to locate in retail centers in neighborhoods and communities throughout the City.
- **Economic Development Policy 3.5: Neighborhood-scale retail centers.** Require neighborhood-scale retail centers and districts to provide street furniture, shading, landscaping, pedestrian circulation, and gathering spaces that enhance the experience of shopping.

Public Facilities and Services Element

- **Public Facilities and Services Policy 1.1: New development.** New development shall pay its fair share of public facility and infrastructure improvements.

- **Public Facilities and Services Policy 1.2: Water supply.** Require that new development demonstrate contractual and actual sustainable water supplies adequate for the new development's demands.
- **Public Facilities and Services Policy 1.3: Annexation.** Prior to annexation, the city must find that adequate water supply and service and wastewater treatment and disposal capacity can be provided for the proposed annexation. Existing water supplies must remain with the land and be transferred to the City upon annexation approval.
- **Public Facilities and Services Policy 2.1: Minimize landfill disposal of solid waste.** Promote solid waste source reduction, reuse, and recycling; composting; and the environmentally-safe transformation of wastes.
- **Public Facilities and Services Policy 2.2: Waste diversion rate.** Waste diversion rate. Meet the state's current and future waste diversion goals through the city's recycling and diversion programs.
- **Public Facilities and Services Policy 3.2: School location.** Coordinate with the school districts to locate primary school facilities to maximize access, walkability, and safety while minimizing impacts to surrounding neighborhoods. Continue to foster the campus approach when siting secondary schools.

Environmental Safety Element

- **Environmental Safety Policy 3.1: Land use compatibility.** Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the Table ES-2 Land Use and Noise Compatibility Matrix and the city's noise ordinance.
- **Environmental Safety Policy 3.2: Land use and traffic patterns.** Discourage land use and traffic patterns that would expose sensitive land uses or noise-sensitive areas to unacceptable noise levels.
- **Environmental Safety Policy 3.3: New residential.** When new residential development is proposed adjacent to land designated for industrial or commercial uses, require the proposed development to assess potential noise impacts and fund feasible noise-related mitigation measures.
- **Environmental Safety Policy 3.4: Acoustical study.** Require an acoustical study for proposed projects that have the potential to exceed acceptable noise thresholds or are exposed to existing or future noise levels in excess of the thresholds in the city's noise ordinance.
- **Environmental Safety Policy 3.5: Site and building design.** Minimize noise impacts by requiring appropriate site, circulation, equipment, and building design, and sound walls, landscaping, and other buffers.

Open Space and Conservation Element

- **Open Space and Conservation Policy 1.1: Parkland standard.** Provide a minimum of 4 acres of public parkland for every 1,000 residents.
- **Open Space and Conservation Policy 1.3: New parks and recreation facilities.** Provide a variety of parks and recreation facilities in undeserved and growing areas of the community.
- **Open Space and Conservation Policy 1.7: Sustainability.** Develop new and maintain existing parks and recreation facilities to achieve fiscal and environmental sustainability.

- **Open Space and Conservation Policy 1.8: Funding.** Require new development to provide pocket and neighborhood parks, dedicate land for area parks, and pay impact fees for community and regional parks. Require new development to establish lighting and landscape maintenance districts to fund operations and maintenance.
- **Open Space and Conservation Policy 2.2: New development.** Encourage new development to incorporate on-site natural resources and low impact development techniques.
- **Open Space and Conservation Policy 2.3: Visual resources.** Maintain public views of open spaces, parks, and natural features. Enhance views along roadways and trails. Preserve Clovis' viewshed of the surrounding foothills and orient new development to capitalize on views of the Sierra Nevada.
- **Open Space and Conservation Policy 3.1: Stormwater management.** Encourage the use of low impact development techniques that retain or mimic natural features for stormwater management.
- **Open Space and Conservation Policy 3.2: Stormwater pollution.** Minimize the use of non-point source pollutants and stormwater runoff.
- **Open Space and Conservation Policy 3.3: Well water.** Prohibit the use of new private wells in new development.
- **Open Space and Conservation Policy 3.4: Drought-tolerant landscaping.** Promote water conservation through the use of drought-tolerant landscaping on existing and new residential properties. Require drought-tolerant landscaping for all new commercial and industrial development and city-maintained landscaping, unless used for recreation purposes.
- **Open Space and Conservation Policy 3.5: Energy and water conservation.** Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the California Building Code.
- **Open Space and Conservation Policy 3.6: Renewable energy.** Promote the use of renewable and sustainable energy sources to serve public and private sector development.
- **Open Space and Conservation Policy 3.7: Construction and design.** Encourage new construction to incorporate energy efficient building and site design strategies.

Air Quality Element

- **Air Quality Policy 1.1: Land use and transportation.** Reduce greenhouse gas and other local pollutant emissions through mixed use and transit-oriented development and well-designed transit, pedestrian, and bicycle systems.
- **Air Quality Policy 1.2: Sensitive land uses.** Prohibit, without sufficient mitigation, the future siting of sensitive land uses within the distances of emission sources as defined by the California Air Resources Board.
- **Air Quality Policy 1.3: Construction activities.** Encourage the use of best management practices during construction activities to reduce emissions of criteria pollutants as outlined by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- **Air Quality Policy 1.8: Trees.** Maintain or plant trees where appropriate to provide shade, absorb carbon, improve oxygenation, slow stormwater runoff, and reduce the heat island effect.

Housing Element[23]

- **Housing Policy 1.1:** Provide adequate sites for new housing development through appropriate planned use designations, zoning, and development standards to accommodate the regional housing needs for the 2013-2023 planning period.
- **Housing Policy 1.2:** Facilitate development of new housing for all economic segments of the community, including extremely low, very low-, low-, moderate-, and above moderate-income households.
- **Housing Policy 1.6:** Promote development of higher-density housing, mixed-use, and transit-oriented development in areas located along major transportation corridors and transit routes served by the necessary infrastructure.
- **Housing Policy 1.7:** Ensure the adequate provision of water, sewer, storm drainage, roads, public facilities, and other infrastructure necessary to serve new housing.
- **Housing Policy 1.8:** Approve new housing in accordance with design standards that will ensure the safety, quality, integrity, and attractiveness of each housing unit.
- **Housing Policy 1.9:** Encourage development around employment centers that provides the opportunity for local residents to live and work in the same community by balancing job opportunities with housing types.
- **Housing Policy 2.7:** Work to ensure that local policies and standards do not act to constrain the production of affordable housing units.
- **Housing Policy 3.1:** Preserve the character, scale and quality of established residential neighborhoods by protecting them from the encroachment of incompatible or potentially disruptive assistance programs.
- **Housing Policy 6.1:** Encourage the use of energy conserving techniques in the design of new housing.
- **Housing Policy 6.2:** Actively implement and enforce all State energy conservation requirements for new residential construction.

City of Clovis Municipal Code, Title 9 – Development Code

The City's Development Code implements the policies of the Clovis General Plan and applicable specific plans by classifying and regulating the uses of land and structures within the City of Clovis. This Development Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City.[24]

[23] Fresno Multi-Jurisdictional 2015-2023 Housing Element, A Regional Plan for Addressing Housing Needs, Goals and Policies. Adopted April 2016. Available at: https://cityofclovis.com/wp-content/uploads/2019/02/Clovis-Housing-Element-1.pdf. Accessed January 2024.

[24] City of Clovis Municipal Code, Title 9 – Development Code. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis09.html. Accessed January 2024.

ZONING MAP

The Zoning Map identifies zoning districts within the City at the parcel level. The Zoning Map does not designate the Project site because the site is not located within the City limits.[25]

County of Fresno General Plan

On February 20, 2024 the Board of Supervisors approved the Comprehensive Zoning Ordinance Update. Through Ordinance No. T-099-385, the updated Zoning Ordinance shall take effect and be in force thirty (30) days from its February 20, 2024 passage.[26] At the time of the publishing of this document, the 2000 Fresno County General Plan is the official version relied upon for the analysis below.[27] The Fresno County General Plan is a policy guide for physical and economic growth of the County. Unincorporated land located within the Project site is currently under the jurisdiction of the County. The Project site area includes AE20 (Exclusive Agriculture), AL20 (Limited Agriculture) and R-R (Rural Residential) Zone Districts. The proposed Master Plan area is designated as AE20 (Exclusive Agriculture) and AL20 (Limited Agriculture) Zone Districts in the County General Plan. The proposed Master Plan includes an area previously approved by the County of Fresno for mini storage land use and memorialized under Fresno County Conditional Use Permit 3526 in the AL20 Zone District.

Fresno County Municipal Code, Zoning Ordinance

The purpose of the Zoning Ordinance is to classify and regulate the highest and best use of buildings, structures, and land located in the unincorporated area of the County of Fresno in a manner consistent with the Fresno County General Plan. This Division incorporates zoning regulations implementing the Fresno County General Plan and all its elements, including the Fresno County Open Space Plan.[28]

ZONING MAP

The Zoning Map identifies zoning districts within the County at the parcel level. Figure 2.0-6 identifies the Fresno County zoning for the Project site and the surrounding area. The Development

[25] City of Clovis Zoning Map. Available at: https://cityofclovis.com/planning-and-development/planning/zoning/. Accessed January 2024.

[26] Zoning Ordinance of the County of Fresno – Land Use and Planning. Available at: https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/development-services-division/zoning-ordinance. Accessed May 2024.

[27] Fresno County General Plan Policy Document. October 3, 2000. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/18117-2000-general-plan-policy-document.pdf. Accessed January 2024.

[28] Zoning Ordinance of the County of Fresno – Land Use and Planning. Last date amended, June 12, 2018. Available at: https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/development-services-division/zoning-ordinance. Accessed January 2024.

Area is zoned AE20, and AL20 by the County. The Non-Development Area is zoned AL20 and RR by the County.

Below is a general description of County zoning within the Project site.

AE20 (Exclusive Agriculture): The "AE" District is intended to be an exclusive district for agriculture and for those uses which are necessary and an integral part of the agricultural operation. It is intended to protect the general welfare of the agricultural community from encroachments of non-related agricultural uses which could be harmful to the physical and economic well-being of the agricultural district. The "AE" District shall be accompanied by an acreage designation which establishes the minimum lot size that may be created within the District. Acreage designations of 640, 320, 160, 80, 40, 20 and 5 are approved for this purpose. Parcel size regulation is deemed necessary to carry out the intent of this District.[29]

AL20 (Limited Agriculture): The "AL" District is a limited agricultural district. It is intended to protect the general welfare of the agricultural community by limiting intensive uses in agricultural areas where such uses may be incompatible with, or injurious to, other less intensive agricultural operations. The District is also intended to reserve and hold certain lands for future urban use by permitting limited agriculture and by regulating those more intensive agricultural uses which, by their nature, may be injurious to non-agricultural uses in the vicinity or inconsistent with the express purpose of reservation for future urban use. The "AL" District shall be accompanied by an acreage designation which establishes the minimum size lot that may be created within the District. Acreage designation of 640, 320, 160, 80, 40, and 20 are provided for this purpose. Parcel size regulation is deemed necessary to carry out the intent of this District.[30]

R-R (Rural Residential): The "R-R" District is intended to create or preserve rural or very large lot residential homesites where a limited range of agricultural activities may be conducted. The "R-R" District is intended to be applied to areas designated as Rural Residential by the General Plan. The minimum lot size that may be created within the "R-R" District without a special acreage designation shall be two acres. The "R-R" District accompanied by the acreage designation of five establishes that the minimum lot size that may be created within the District shall be five acres.[31]

[29] Fresno County Zoning Ordinance, Section 816, "AE" – Exclusive Agricultural District. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/36254-816ae_6-18_final.pdf. Accessed January 2024.
[30] Fresno County Zoning Ordinance, Section 817, "AL" – Limited Agricultural District. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/36256-817al_6-18_final.pdf. Accessed January 2024.
[31] Fresno County Zoning Ordinance, Section 820, "R-R" – Rural Residential District. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/36258-820r-r_6-18_final.pdf. Accessed January 2024.

3.10.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on land use, population, or housing if it will:

- Physically divide an established community;
- 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;
- 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); or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: The proposed Project would not physically divide an established community. (Less Than Significant)

The Project site is located directly north of the City of Clovis limit line and is adjacent primarily to undeveloped agricultural land, rural residential land, and low-density residential uses. The Project site would result in an extension of developed uses within an area of the City that currently has approved development plans within the vicinity of the Project site. The Project would provide roadways and pedestrian pathways to connect the Project site to the existing circulation system and to allow access to and from the site. Development of the Project site would not result in physical barriers, such as a highway, wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing and planned developments. Therefore, impacts would be **less than significant** with regard to the physical division of an established community, and no mitigation measures are required.

Impact 3.10-2: The proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect. (Less than Significant)

Land use plans, policies, and regulations that govern the land uses on the Project site and have jurisdiction over the Project include the Fresno County General Plan, Fresno County Municipal Code, Clovis General Plan, Clovis Municipal Code, and the Fresno LAFCo Policies and Procedures for Annexation and Detachment.

FRESNO COUNTY GENERAL PLAN AND FRESNO COUNTY MUNICIPAL CODE

As noted previously, the Project site is currently within Fresno County and not within the City of Clovis' SOI. The Fresno County General Plan and Fresno County Municipal Code are the current governing documents for the Project site.

The proposed Project includes a SOI expansion of 139 APNs totaling 952 acres and an annexation of 28 of those APNs, totaling approximately 507 acres. The 507-acre annexation area is the Master Plan area. Figure 2.0-3 illustrates the Assessor's Parcels that would be annexed. Upon annexation of the Master Plan area, the Fresno County General Plan and Fresno County Municipal Code would not apply to the Project.

CITY OF CLOVIS GENERAL PLAN

Since general plans often contain numerous policies emphasizing differing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or arguably inconsistent with some individual policies. The Project is consistent with the key land use issues and development concepts of the Clovis General Plan, which provide for logical growth of the City, emphasize community form, scale, and identify, encourage attractive, sustainable neighborhoods, support public transit and bicycle and pedestrian circulation, encourage housing opportunity, promote employment and economic development, encourage a mix of land uses that balance public services and fiscal sustainability, and promote access to open space. The Project is located adjacent to the City of Clovis' SOI and current City limits and will provide for housing, employment, educational and recreational opportunities.

When land uses are not consistent with a General Plan, there are two courses of action: 1) the uses are not allowed due to the inconsistency, or 2) the land uses are changed through an amendment to the General Plan to create consistency. The proposed Project will require a General Plan Land Use Amendment to adjust the land use designation to Mixed Use Village for the Development Area to accommodate the proposed development density. The proposed modification to the original boundaries of the City of Clovis General Plan Focus Area 13 would memorialize the 507-acre Master Plan as a subarea of Focus Area 13. The proposed General Plan land use designation for the Development Area is shown on Figure 2.0-7. Figure 2.0-8 illustrates the Focus Area 13. Approval of the General Plan amendment would ensure that the proposed Project would be substantially consistent with the Clovis General Plan land use requirements.

Additionally, the proposed Project is generally consistent with the vast majority of the applicable General Plan policies, which aim to avoid or mitigate an environmental effect. As shown in Table 3.10-3, the Project is consistent with the City's existing General Plan policies and would not conflict with policies adopted to avoid or mitigate an environmental effect.

TABLE 3.10-3: GENERAL PLAN EXISTING POLICY CONSISTENCY

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
LAND USE ELEMENT	
LU Policy 3.2: Individual development project. When Projects are proposed in an Urban Center, require a conceptual master plan to show how a proposed project could relate to possible future development of adjacent and nearby properties. The conceptual master plan should generally cover about 160 acres or the adjacent area bounded by major arterials, canals, or other major geographical features. The conceptual master plan should address: A. Compliance with the comprehensive design document (see Policy 3.1) B. A consistent design theme C. A mix of housing types D. Adequate supply and distribution of neighborhood parks E. Safe and direct pedestrian and bicycle linkages between residential areas and school sites, parks, and community activity centers	**Consistent.** Future implementation of the proposed Project would result in individual developments within the Urban Center, in compliance with the master plan prepared in accordance with all applicable City requirements, in order for decisionmakers to consider project-related impacts on nearby properties in the surrounding area. Review of such conceptual master plans would include compliance with applicable design guidelines, demonstrate design themes, housing typologies, parks and open space, and consideration of pedestrian and bicycle amenities in the community. A. The Vista Ranch Master Plan would include the requisite components to demonstrate consistency by providing comprehensive design guidelines. B. The Vista Ranch Master Plan provides standards for a consistent design theme and depictions of architectural theme for the Project. C. The Vista Ranch Master Plan includes a mix of housing types, including Low Density Residential, Medium Density Residential, Medium-High Density Residential and Very High Density Residential. D. The Vista Ranch Master Plan would include a variety of open space, trail, and parks interspersed throughout the Project site. E. The Vista Ranch Master Plan includes planned pedestrian pathways, bicycle paths and linkages to proposed residential areas, school sites, parks, and community activity areas. As compliance with these provisions would be required for all new future developments with the Urban Center, the proposed Project would be consistent with this policy.
LU Policy 3.5: Fiscal sustainability. The City shall require establishment of community facility districts, lighting and landscaping maintenance districts, special districts, and other special funding or financing tools in conjunction with or as a condition of development, building or permit approval, or annexation or sphere of influence amendments when necessary to ensure that new development is fiscally neutral or beneficial.	**Consistent.** The Project would include new development which would require the establishment of community facility districts, as the Project proposes to construct new residences, commercial uses, a new elementary school, park facilities, and improvements to lighting and landscaping that would require funding mechanisms in place for maintenance and construction. All activities would take place in compliance with City requirements related to financing and other community benefit agreements.
LU Policy 3.6: Mix of housing types and uses. Development is encouraged to provide a mix of housing types, unit sizes, and densities at the block level. To accomplish this, individual projects five acres or larger may be	**Consistent.** The Project would construct up to 3,286 new residential units, which would be provided in variety of housing mixes, including different types, styles, and densities, as further illustrated in the Master Plan.

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
developed at densities equivalent to one designation higher or lower than the assigned designation, provided that the density across an individual project remains consistent with the General Plan.	
LU Policy 3.7: Urban Village neighborhood concept. Residential developments in Urban Centers must contribute to and become part of a neighborhood by incorporating a central park feature, a school complex, a hierarchy of streets, pedestrian pathways, or other neighborhood amenities. Higher density residential should be next to lands designated Mixed Use Village. The City may also require the application of the urban village neighborhood concept in areas outside of an Urban Center.	**Consistent.** The Project is proposing uses consistent with the requirements of Urban Center development, as the Project is proposing to develop 59 acres of parks, trails and preserved open space areas, a 19-acre elementary school, and pedestrian and neighborhood amenities, in addition to the residential units. As the Project proposes to create a new Mixed Use Village designation, future development would be required to comply with density and siting requirements in each respective area.
LU Policy 3.8: Land use compatibility. Within Urban Center, new development that is immediately adjacent to properties designated for rural residential and agricultural uses shall bear the major responsibility of achieving land use compatibility and buffering.	**Consistent.** The Project would comply with City requirements related to development within the Urban Center, specifically as related to properties adjacent to R-R, AL and AE land uses. Future development resulting from Project implementation would be designed with consideration for compatibility and buffering, as illustrated in the Master Development Plan.
LU Policy 3.9: Connected Development. New development in Urban Centers must fully improve roadway, pedestrian and bicycle systems within and adjacent to the proposed project and connect to existing urbanized development.	**Consistent.** The Project would comply with City requirements for new development within designated Urban Centers, as roadway, pedestrian and bicycle facility improvements would be included in future implementation.
LU Policy 4.1: Clovis leadership. The City shall take a leadership role in the land use planning for the sphere of influence and entire Clovis General Plan Area.	**Consistent.** The City is the CEQA Lead Agency and also required to approve the General Plan amendments and other requirements within the General Plan area. As such, the Project would be subject to City requirements related to land use planning and approvals of future development resulting from Project implementation.
LU Policy 4.3: Future environmental clearance. The City shall monitor development and plan for additional environmental clearance as development levels approach those evaluated in the General Plan EIR.	**Consistent.** This EIR is being prepared to provide environmental clearance for the Project at a project and programmatic level and can be used as the basis for future environmental documentation, as warranted and determined by the City. Each future implementing project would need to be evaluated on a project-by-project basis, in accordance with City requirements.
LU Policy 5.1: Housing variety in developments. The Clovis General Plan has been planned to provide a variety of housing product types suitable to each stage of a person's life. Each development should contribute to a diversity of housing sizes and types within the standards appropriate to the	**Consistent.** The Project proposes to provide a variety of housing types, sizes, and densities, to provide suitable housing for varying income levels and demographics.

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
land use designation. This policy does not apply to projects smaller than five acres.	
LU Policy 6.1: Amendment criteria. The City Council may approve amendments to the General Plan when the City Council is satisfied that the following conditions are met: A. The proposed change is and will be fiscally neutral or positive. B. The proposed change can be adequately served by public facilities and would not negatively impact service on existing development or the ability to service future development. C. The proposed change is consistent with the Urban Village Neighborhood Concept when within an Urban Center. D. General Plan amendments proposing a change from industrial, mixed-use business campus, or office (employment generating) land use designations to non-employment-generating land use designation shall be accompanied by an analysis of the potential impacts on the change or loss in the types of jobs. E. This policy does not apply to: i. County designations within the Clovis Planning Area or changes made by the City Council outside of the sphere boundary to reflect changes made by the County of Fresno. ii. Changes initiated by public agencies (such as school districts, flood control) for use by public agencies. iii. Changes initiated by the city within a specific plan.	**Consistent.** The proposed Project will require a General Plan Land Use Amendment to adjust the land uses in MPArea 1 from L, M, MH, MU-V, PK, OS, and S to the Mixed Use Village land use designation and a modification of the City General Plan Focus Area 13 that would memorialize the 507-acre Master Plan area as a subarea (Focus Area 13a) of Focus Area 13. The Mixed Use Village land use designation would allow for the development of a master planned community through multiple zoning designations, including the Master Plan Community Overlay District. The adopted attributes of Focus Area 13a would include the following: <u>Primary Land Use</u>: Mixed-use village within an Urban Center <u>Additional Uses Allowed</u>: As indicated in the Vista Ranch Master Development Plan <u>Design Features</u>: • Master plan required. • Development should give special consideration to buffering of residential uses adjacent to the Focus Area. • Development should integrate with and support active and public transportation. • Development should reflect, in its design, the legacy and landmarks of the local Sierra foothill area. • The master planned community should provide for a variety of "lifecycle" housing types. • Development should encourage "walkability" and safe pedestrian and bicycle routes to all land uses. • Trails, parks, and open spaces should logically connect with the greater Clovis area and provide additional recreational opportunities for the City of Clovis. • Development shall incorporate neighborhood serving commercial and service uses, as well as educational opportunities. • The residential unit count shall not exceed 3,286 units. • The density shall establish a mixture of housing types, sizes and densities that collectively provide for local and regional housing demand. Densities may vary between 2.1 to 43 du/acre. The proposed Project would be developed within an area planned for urbanization by the City of Clovis General Plan. It would also be fiscally positive as the proposed residences would be subject to property tax, and the future residents

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	of the Project would participate in the local job market and economy, thus providing sales tax revenue. Furthermore, the proposed commercial/office uses would provide tax revenue to the City and contribute to the prosperity of the region by providing jobs and neighborhood serving amenities.
LU Policy 6.2: Smart Growth. The City is committed to the following smart growth goals. A. Create a range of housing opportunities and choices B. Create walkable neighborhoods C. Encourage community and stakeholder collaboration D. Foster distinctive, attractive communities with a strong sense of place E. Make development conditions predictable, fair and cost effective F. Mix land uses G. Preserve open space, farmland, natural beauty, and critical environmental areas H. Provide a variety of transportation choices I. Strengthen and direct development toward existing communities J. Take advantage of compact building design K. Enhance the economic vitality of the region L. Support actions that encourage environmental resource management	**Consistent:** The Project is consistent with the Smart Growth goals . A. The Project provides a range of housing opportunities and choices from low density residential to very high density residential. B. The Project creates walkable neighborhoods with connectivity via a network of trails to amenities including school, commercial and community recreation. C. The Vista Ranch community has implemented community and stakeholder information in the project including General Plan, Parks Master Plan 2018, Active Transportation Plan comments as well as stakeholder input. D. The Project applies innovative site planning and design solutions to create a sense of place in all environments at all scales. E. The Master Development Plan memorializes the development of the community. F. Vista Ranch includes a mix of residential, nonresidential and open space uses throughout the community. G. The Master Plan preserves critical environmental areas throughout the community, including corridor adjacent to Big Dry Creek Reservoir and the Big Dry Creek Reservoir Outlet Works Channel and adjacent tailwater pond. H. The Project provide a multitude of alternative transportation choices including pedestrian paths, multitude of bicycle paths Class I and II and provisions for NEV. The Project has also taken into account extension of transit routes and will provide several transit stops within the community. I. The Vista Ranch project is adjacent to the Clovis City limits and adjacent to both wet utilities and dry utilities that will service the project. J. The project incorporates compact building design. K. The project will increase local property values, create temporary and permanent employment for the area and provide sales tax generating business. L. The development of Vista Ranch will include the preservation of onsite resources as well as on offsite conservation easement.

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
CIRCULATION ELEMENT	
CIR Policy 1.1: Multimodal network. The city shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.	**Consistent.** The Project seeks to develop a strong pedestrian network that links activities, recreational amenities, local commercial uses, and neighborhoods together. It also proposes to provide infrastructure that meets City standards and is integrated within existing and planned facilities and connections. The Project proposes a modification to Shepherd Avenue, including a relocated vehicular access point along the limited access designation of Shepherd Avenue adjacent to the proposed Focus Area 13a, creating a new access point along the north side of Sheperd Avenue for the proposed Project. In addition, modifications to the Circulation Element are requested, by adding major street route designations for Temperance and Locan Avenues within the new Focus Area 13a, as they would provide access points to the proposed Master Plan area. Additional modifications to the Circulation Element are proposed, adding and connecting multipurpose trails and bike lanes with the Development Area to integrate with the current Clovis trail and bike system.
CIR Policy 1.2: Transportation decisions. Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists.	**Consistent.** The Project seeks to develop a strong pedestrian network that links activities, recreational amenities, local commercial uses, and neighborhoods together. It also proposes to provide infrastructure that meets City standards and is integrated within existing and planned facilities and connections.
CIR Policy 1.3: Age and mobility. The design of roadways shall consider all potential users, including children, seniors, and persons with disabilities. **CIR Policy 1.5: Neighborhood connectivity.** The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses	**Consistent.** The Master Plan proposes a hierarchy of roadways to accommodate the capacity needs of the existing street network, as well as providing additional vehicular access to the Master Plan. Shepherd Avenue and Temperance Avenue are the main roadways providing access to the Development Area. The neighborhoods within the Master Plan would include a network of public and private residential streets to provide an efficient flow of traffic and pedestrian mobility through the Development Area. Additionally, sidewalks would be included per the City of Clovis standards.
CIR Policy 1.6: Internal circulation. New development shall utilize a grid or modified-grid street pattern. Areas designated for residential and mixed-use village developments should feature short block lengths of 200 to 600 feet.	**Consistent.** The proposed General Plan land use designation for the Master Plan area is Mixed Use Village, allowing for the development of a master planned community through multiple zoning designations, including the Master Plan Community Overlay District. The neighborhoods within the Master Plan would include a network of public and private residential streets to provide an efficient flow of traffic and pedestrian mobility through the Development Area.

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	Therefore, the Project would comply with the shorter block length requirement.
CIR Policy 1.8: Network completion. New development shall complete the extension of stub streets planned to connect to adjacent streets, where appropriate.	**Consistent.** The proposed Shepherd Avenue access modification includes a relocated vehicular access point along the limited access designation of Shepherd Avenue adjacent to the proposed Focus Area 13a. Current City of Clovis policy is to allow permanent street access points at the one-half-mile points along this portion of Shepherd Avenue. While an intersection access does occur at Armstrong Avenue, the Shenandoah Farms residential development (approved in the County of Fresno) precludes any extension of Armstrong Avenue to the north. The proposed Shepherd Avenue access modification would move what would have been an allowable access point approximately 500 feet to the east, creating a non-signalized "right-in, right-out, left-in" ingress and egress on the north side of Shepherd Avenue. This configuration would interface appropriately with the currently existing Armstrong/Shepherd Avenue intersection. The proposed Circulation Element modifications may include an amendment to the City of Clovis General Plan by proposing to add major street route designations within Focus Area 13a. Focus Area 13a, as requested to be modified, abuts Shepherd Avenue, a designated Expressway, along its southern boundary, which includes three significant intersections: Armstrong Avenue, designated as a local street; Temperance Avenue designated as an Arterial; and Locan Avenue, designated as a Collector. While Armstrong Avenue's extension to the north is impeded by the Shenandoah Farms residential development (approved in the County of Fresno), the Temperance Avenue and Locan Avenue intersections provide access points to the proposed Master Plan area. Given the traffic lane geometrics of these pre-existing intersections, as well as the traffic load generated by the proposed Master Plan, major street designations are being proposed and are requested to be added to the Circulation Element of Clovis' General Plan.
CIR Policy 2.3: Fair share costs. New development shall pay its fair share of the cost for circulation improvements in accordance with the City's traffic fee mitigation program.	**Consistent.** The proposed Project would pay its fair share of required costs for circulation improvements, in compliance with all applicable City regulations.
CIR Policy 3.1: Traffic calming. Employ traffic-calming measures in new developments and existing neighborhoods to control traffic speeds and maintain safety.	**Consistent.** The neighborhoods within the Master Plan would include a network of public and private residential streets to provide an efficient flow of traffic and pedestrian mobility through the Development Area. Should other

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	traffic calming measures be warranted, the Project would comply with all applicable City design requirements.
CIR Policy 3.12: Residential orientation. Where feasible, residential development should face local and collector streets to increase visibility and safety of travelers along the streets and encourage pedestrian and bicycle access. **CIR Policy 4.1: Bike and transit backbone.** The bicycle and transit system should connect Shaw Avenue, Old Town, the Medical Center/R&T Park, and the three Urban Centers. **CIR Policy 5.1: Complete-street amenities.** Upgrade existing streets and design new streets to include complete street amenities, prioritizing improvements to bicycle and pedestrian connectivity or safety, consistent with the Bicycle Transportation Master Plan and other master plans.	**Consistent.** The Project seeks to develop a strong pedestrian network that links activities, recreational amenities, local commercial uses and neighborhoods together. It also proposes to provide infrastructure that meets City standards and is integrated within existing and planned facilities and connections. Additional modifications to the Circulation Element are proposed, adding and connecting multipurpose trails and bike lanes with the Development Area to integrate with the current Clovis trail and bike system.
CIR Policy 5.2: Development-funded facilities. Require development to fund and construct facilities as shown in the Bicycle Transportation Plan when facilities are in or adjacent to the development.	**Consistent.** The Project seeks to develop a strong pedestrian network that links activities, recreational amenities, local commercial uses and neighborhoods together. It also proposes to provide infrastructure that meets City standards and is integrated within existing and planned facilities and connections. Additional modifications to the Circulation Element are proposed, adding and connecting multipurpose trails and bike lanes with the Development Area to integrate with the current Clovis trail and bike system. The neighborhoods within the Master Plan would include a network of public and private residential streets to provide an efficient flow of traffic and pedestrian mobility through the Development Area. Should funding for bike facilities be warranted, the Project would comply with all applicable City requirements.
CIR Policy 5.3: Pathways. Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger. **CIR Policy 5.5: Pedestrian access.** Require sidewalks, paths, and crosswalks to provide access to schools, parks, and other activity centers and to provide general pedestrian connectivity throughout the city.	**Consistent.** The Project seeks to develop a strong pedestrian network that links activities, recreational amenities, local commercial uses and neighborhoods together. The Master Plan includes an extensive trail circulation system, which is intended to provide neighborhood connectivity and convenient and safe access to the various community amenities and commercial areas.

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
PUBLIC FACILITIES AND SERVICES ELEMENT	
PFS-Policy 1.1: New development. New development shall pay its fair share of public facility and infrastructure improvements.	**Consistent.** The Project would be required to pay the police facility fee in accordance with Clovis Municipal Code Chapter 4.11, Police Department Fees. Additionally, the Project would be required to pay the community facility fee in accordance with Clovis Municipal Code Chapter 4.10, Fire Facility Development Impact Fee. Further, the Project would be required to pay the school impact fees in accordance with Education Code § 17620 and Government Code § 65995. Lastly, the Project would be subject to development impact fees, library fees, and parkland fees, as required by the City.
PFS Policy 1.2: Water supply. Require that new development demonstrate contractual and actual sustainable water supplies adequate for the new development's demands.	**Consistent.** The Master Plan would be served by a new connection to the City of Clovis potable and non-potable water distribution system. The proposed water system would be located within proposed public utilities easements and connected to existing City main lines. All water system infrastructure would comply with City Master Plans and standards.
PFS Policy 1.3: Annexation. Prior to annexation, the city must find that adequate water supply and service and wastewater treatment and disposal capacity can be provided for the proposed annexation. Existing water supplies must remain with the land and be transferred to the City upon annexation approval.	**Consistent.** Based on the proposed Project's size and characteristics, completion of a Water Supply Assessment per Senate Bill 610 would be required, to verify the availability of water supplies for the Project. Wastewater treatment and disposal would also be verified. The Master Plan would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines. Wastewater treatment would be provided at the existing Fresno-Clovis Regional Wastewater Treatment Plant, in the City of Fresno, and by the City's Water Reuse Facility.
PFS Policy 2.1: Minimize landfill disposal of solid waste. Promote solid waste source reduction, reuse, and recycling; composting; and the environmentally safe transformation of wastes. **PFS Policy 2.2: Waste diversion rate.** Waste diversion rate. Meet the state's current and future waste diversion goals through the city's recycling and diversion programs.	**Consistent.** Future development resulting from implementation of the proposed Project would be required to comply with solid waste diversion requirements and would also be developed in a sustainable and efficient manner.
PFS 3.2: School location. Coordinate with the school districts to locate primary school facilities to maximize access, walkability, and safety while minimizing impacts to surrounding neighborhoods. Continue to foster the campus approach when siting secondary schools.	**Consistent.** Development of a new elementary school would be coordinated with the Clovis Unified School District. The Project seeks to develop a strong pedestrian network that links activities, recreational amenities, local commercial uses and neighborhoods together. The Master Plan includes an extensive trail circulation system, which is intended to provide neighborhood connectivity and

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	convenient and safe access to the various community amenities and commercial areas.
ENVIRONMENTAL SAFETY ELEMENT	
ES Policy 3.1: Land use compatibility. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the Table ES-2 Land Use and Noise Compatibility Matrix and the city's noise ordinance.	**Consistent.** The Project would be required to ensure that future development would be compatible with the General Plan Land Use and Noise Compatibility Matrix, and should mitigation be warranted, compliance would be undertaken in accordance with City requirements.
ES Policy 3.2: Land use and traffic patterns. Discourage land use and traffic patterns that would expose sensitive land uses or noise-sensitive areas to unacceptable noise levels.	**Consistent.** The neighborhoods within the Master Plan would include a network of public and private residential streets to provide an efficient flow of traffic and pedestrian mobility through the Development Area. The Project would not develop incompatible uses within proximity to one another. Project design features give special consideration to future development, including buffering of residential uses adjacent to the Focus area. The Project would be developed in compliance with the City requirements for the Master Plan as proposed.
ES Policy 3.3: New residential. When new residential development is proposed adjacent to land designated for industrial or commercial uses, require the proposed development to assess potential noise impacts and fund feasible noise-related mitigation measures.	**Consistent.** The Project proposes to develop new residential uses within the Master Plan area that could be adjacent to land uses which may be zoned for industrial or commercial uses, including light industrial for a mini-storage and neighborhood commercial. Project design features give special consideration to future development, including buffering of residential uses adjacent to the Focus area. Potential noise impacts would be assessed on a project-by-project basis, and should noise-related mitigation be required, future implementing developments would comply with City requirements.
ES Policy 3.4: Acoustical study. Require an acoustical study for proposed projects that have the potential to exceed acceptable noise thresholds or are exposed to existing or future noise levels in excess of the thresholds in the city's noise ordinance.	**Consistent.** Potential noise impacts resulting from future Project implementation would be evaluated on a project-by-project basis, per City Noise Ordinance requirements, with acoustical studies prepared, as appropriate, for projects with the potential to exceed noise thresholds.
ES Policy 3.5: Site and building design. Minimize noise impacts by requiring appropriate site, circulation, equipment, and building design, and sound walls, landscaping, and other buffers.	**Consistent.** All appropriate measures to reduce noise impacts will be incorporated as design features and incorporated into future development on a project-by-project basis, as appropriate, and as required by the City. Project design features give special consideration to future development, including buffering of residential uses adjacent to the Focus area. If required, mitigation measures will be incorporated into future development projects.
OPEN SPACE AND CONSERVATION ELEMENT	
OSC Policy 1.1: Parkland standard. Provide a minimum of 4 acres of public parkland for every 1,000 residents.	**Consistent.** The Project is estimated to result in approximately 9,333 new residents, based on the maximum amount of residential development. As such, a total of approximately 37.3 acres of parkland would be required to

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	accommodate new residents. The Project proposes to include 59 acres of parks, trails, and preserved open space within the Master Plan area. Based on this, the public parkland standard of four acres per 1,000 residents would be met and substantially exceeded.
OSC Policy 1.3: New parks and recreation facilities. Provide a variety of parks and recreation facilities in underserved and growing areas of the community.	**Consistent.** The Project proposes to include 59 acres of parks, trails, and preserved open space within the Master Plan area. While much of the existing Project area is undeveloped, it is not available for public enjoyment as parkland. The Master Plan includes an extensive trail circulation system, which is intended to provide neighborhood connectivity and convenient and safe access to the various community amenities and commercial areas. In addition, multiple parks are dispersed throughout the Master Plan. These trail and park areas would combine or provide nearby public recreational elements (City Park) and private recreational facilities for the Master Planned community. The City Park space is designed to be approximately 7.8 acres in area. The medium-high density gated neighborhoods would provide small parks or small community pools to those neighborhoods.
OSC Policy 1.7: Sustainability. Develop new and maintain existing parks and recreation facilities to achieve fiscal and environmental sustainability.	**Consistent.** The proposed Project would be developed within an area planned for urbanization by the City of Clovis General Plan. It would also be fiscally positive as the proposed residences would be subject to property tax, thereby providing financial support to local City programs and amenities, including park and recreation facilities. Furthermore, the proposed commercial uses would provide tax revenue to the City and contribute to the prosperity of the region by providing jobs and neighborhood serving amenities.
OSC-Policy 1.8: Funding. Require new development to provide pocket and neighborhood parks, dedicate land for area parks, and pay impact fees for community and regional parks. Require new development to establish lighting and landscape maintenance districts to fund operations and maintenance.	**Consistent.** The Master Plan includes an extensive trail circulation system, which is intended to provide neighborhood connectivity and convenient and safe access to the various community amenities and commercial areas. In addition, multiple parks are dispersed throughout the Master Plan. These trail and park areas would combine or provide nearby public recreational elements (City Park) and private recreational facilities for the Master Planned community. The City Park space is designed to be approximately 7.8 acres in area. The medium-high density gated neighborhoods would provide small parks or small community pools to those neighborhoods.
OSC-Policy 2.2: New development. Encourage new development to incorporate on-site natural resources and low impact development techniques.	**Consistent.** The Project proposes to include 59 acres of parks, trails and preserved open space within the Master Plan area and is intended to embrace natural resources in the Project area. While much of the existing Project area is undeveloped, it is not available for public enjoyment as parkland. Multiple parks would be dispersed throughout

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	the Master Plan area. On-site natural resources will be incorporated into the development of future projects as feasible. Furthermore, the future development would include low impact development techniques and implementation of best management practices.
OSC Policy 2.3: Visual resources. Maintain public views of open spaces, parks, and natural features. Enhance views along roadways and trails. Preserve Clovis' viewshed of the surrounding foothills and orient new development to capitalize on views of the Sierra Nevada.	**Consistent.** One of the Project objectives is to embrace nature resources and views of the Sierra Nevada. The City gives substantial consideration to the preservation of scenic vistas, corridors, and scenic resources, such as maintaining public views of open spaces, parks, and natural features; enhancing views along roadways and trails; preserving Clovis' viewshed of the surrounding foothills; and orienting new development to capitalize on views of the Sierra Nevada. Development in accordance with these City development code requirements would ensure that the implementation of the proposed Project would not have a substantial adverse impact on scenic vistas, corridors, or resources in the City of Clovis to the greatest extent feasible.
OSC Policy 3.1: Stormwater management. Encourage the use of low impact development techniques that retain or mimic natural features for stormwater management.	**Consistent.** The Master Plan would include construction of a new storm drainage system, which would conform to applicable regulations, standards, and specifications of the State Water Resources Control Board requirements (SWRCB), the Fresno Metropolitan Flood Control District (FMFCD), and City of Clovis. This includes, but is not limited to, the municipal National Pollutant Discharge Elimination System (NPDES) storm water discharge permit, as well as Best Management Practices (BMPs) to control the volume, rate, and potential pollutant load of storm water runoff. Stormwater throughout the City is collected in FMFCD's basins.
OSC Policy 3.2: Stormwater pollution. Minimize the use of non-point source pollutants and stormwater runoff.	**Consistent.** As noted previously, the Project includes low impact development techniques and implementation of best management practices, such as the proposed stormwater drainage system.
OSC Policy 3.3: Well water. Prohibit the use of new private wells in new development.	**Consistent:** The proposed Project would connect to existing municipal water conveyance and does not propose to include new private wells for the use of groundwater beneath the Project site.
OSC Policy 3.4: Drought-tolerant landscaping. Promote water conservation through the use of drought-tolerant landscaping on existing and new residential properties. Require drought-tolerant landscaping for all new commercial and industrial development and city-maintained landscaping, unless used for recreation purposes	**Consistent.** The proposed Project would include extensive new landscaping and greenspace, all of which would be subject to the City's Water Efficient Landscape Requirements set forth in the City's Municipal Code.
OSC Policy 3.5: Energy and water conservation. Encourage new development and substantial rehabilitation projects to	**Consistent.** The proposed Project would be designed and developed in accordance with California Green Buildings Code (CalGreen), including provisions for energy efficiency

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
exceed energy and water conservation and reduction standards set in the California Building Code.	and water conservation reduction standards. It would also be subject to the City's Water Efficient Landscape Requirements set forth in the City's Municipal Code.
OSC Policy 3.6: Renewable energy. Promote the use of renewable and sustainable energy sources to serve public and private sector development.	**Consistent.** The proposed Project would be designed and developed in accordance with California Green Buildings Code (CalGreen), including provisions for energy efficiency and water conservation reduction standards, thereby promoting the use of renewable and sustainable energy sources.
OSC Policy 3.7: Construction and design. Encourage new construction to incorporate energy efficient building and site design strategies.	**Consistent.** The proposed Project would be designed and developed in accordance with California Green Buildings Code (CalGreen), including provisions for energy efficiency and water conservation reduction standards.
AIR QUALITY ELEMENT	
AQ Policy 1.1: Land use and transportation. Reduce greenhouse gas and other local pollutant emissions through mixed use and transit-oriented development and well-designed transit, pedestrian, and bicycle systems.	**Consistent.** As discussed previously, the Project includes well-designed pedestrian and bicycle systems. These systems would help reduce mobile greenhouse gas emissions by reducing vehicle miles traveled (VMT). Future Project development would be required to implement Project Design Features proposed as measures to help reduce VMT and other environmental impacts. Collectively, these Project Design Features functionally serve to mitigate, or reduce impacts from greenhouse gas emissions the impact to the extent feasible.
AQ Policy 1.2: Sensitive Land Uses. Prohibit, without sufficient mitigation, the future siting of sensitive land uses within the distances of emission sources as defined by the California Air Resources Board.	**Consistent.** The California Air Resources Board (CARB) published the Air Quality and Land Use Handbook: A Community Health Perspective, to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial, and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. Residences are proposed as part of the Project, which are considered traditional sensitive receptors. However, the residences would not be located within 500 feet of a freeway or high-traffic road, or be within any of the other CARB minimum separation recommendations on siting sensitive land uses. Regardless, since the proposed Project would not site land uses that would generate a significant risk of public exposure to toxic air contaminants, the proposed Project would be consistent with this policy.
AQ Policy 1.3: Construction activities. Encourage the use of best management practices during construction activities to reduce emissions of criteria pollutants as outlined by the San Joaquin Valley Air Pollution Control District (SJVAPCD).	**Consistent.** The SJVAPCD requires construction related mitigation in accordance with their rules and regulations. The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements, as well as implement the

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	mitigation measures provided by the SJVAPCD for construction-related emissions.
AQ Policy 1.8: Trees. Maintain or plant trees where appropriate to provide shade, absorb carbon, improve oxygenation, slow stormwater runoff, and reduce the heat island effect.	**Consistent.** The proposed Project includes 59 acres of parks, trails and preserved open space in addition to greenspace and landscaping which would include planting of trees. These trees would provide shade, absorb carbon, improve oxygenation, slow stormwater runoff, and reduce the heat island effect.
HOUSING ELEMENT	
HE Policy 1.1: Provide adequate sites for new housing development through appropriate planned use designations, zoning, and development standards to accommodate the regional housing needs for the 2013-2023 planning period.	**Consistent.** The proposed Project would actively support the goals of the new housing element by providing additional housing, at a variety of income levels and configurations, thereby assisting the City with the creation of new housing as required by the Regional Housing Needs Assessment.
HE Policy 1.2: Facilitate development of new housing for all economic segments of the community, including extremely low, very low-, low-, moderate-, and above moderate-income households.	**Consistent.** The proposed Project would develop new housing for a variety of economic levels, including high and very high density residential uses, thereby providing options at varying income levels. In addition, Project objectives include refining the mixture of housing types, sizes and densities that collectively provide for the local and regional housing demand and to increase affordability and housing diversity by developing urban uses in an area planned for such uses in the City of Clovis General Plan, that are proximate to urban services and roadways.
HE Policy 1.6: Promote development of higher-density housing, mixed-use, and transit-oriented development in areas located along major transportation corridors and transit routes served by the necessary infrastructure.	**Consistent.** Project objectives include refining the mixture of housing types, sizes and densities that collectively provide for the local and regional housing demand and to increase affordability and housing diversity by developing urban uses in an area planned for such uses in the City of Clovis General Plan, that are proximate to urban services and roadways. The proposed Project would develop new housing for a variety of economic levels, including high and very high density residential uses, thereby providing options at varying income levels.
HE Policy 1.7: Ensure the adequate provision of water, sewer, storm drainage, roads, public facilities, and other infrastructure necessary to serve new housing.	**Consistent.** One of the primary Project objectives is to provide infrastructure that meets City standards and is integrated with existing and planned facilities and connections.
HE Policy 1.8: Approve new housing in accordance with design standards that will ensure the safety, quality, integrity, and attractiveness of each housing unit.	**Consistent.** The proposed Project would construct all new housing in accordance with applicable design requirements, including visually attractive residences and a safe and secure environment to accommodate future housing demand in the City.
HE Policy 1.9: Encourage development around employment centers that provides the opportunity for local residents to live and work in the same community by balancing job opportunities with housing types.	**Consistent.** The proposed Project seeks to increase affordability and housing by developing urban uses in an area planned for such uses in the General Plan that are proximate to urban services. It also seeks to refine the mixture of housing types, sizes, and densities to collectively provide for the local and regional housing demand. Under

GENERAL PLAN POLICY	*PROJECT CONSISTENCY*
	the proposed new Master Plan Community overlay zone, in addition to the variety of housing types, size and densities proposed, the new Neighborhood Commercial and Light Industrial zoning designations will permit new employment opportunities on the community to balance jobs and housing in the area.
HE Policy 2.7: Work to ensure that local policies and standards do not act to constrain the production of affordable housing units.	**Consistent.** The proposed Project is actively working towards policies and standards that act to promote the production of affordable housing units. The Master Plan Community overall zone creates new zoning districts will create opportunities for housing ranging from low density to very high density, thereby enabling a variety of housing to be developed.
HE Policy 3.1: Preserve the character, scale and quality of established residential neighborhoods by protecting them from the encroachment of incompatible or potentially disruptive assistance programs.	**Consistent.** The Project is proposing uses consistent in character with the existing neighborhoods and would also comply with the requirements of Urban Center development, as the Project is proposing to develop 59 acres of parks, trails and preserved open space areas, a 19-acre elementary school, and pedestrian and neighborhood amenities, in addition to the residential units. As the Project proposes to create a new Mixed Use Village designation, future development would be required to comply with density and siting requirements in each respective area.
HE Policy 6.1: Encourage the use of energy conserving techniques in the design of new housing. **HE Policy 6.2:** Actively implement and enforce all State energy conservation requirements for new residential construction.	**Consistent.** The proposed Project would be designed and developed in accordance with California Green Buildings Code (CalGreen), including provisions for energy efficiency and water conservation reduction standards, thereby promoting the use of renewable and sustainable energy sources.

SOURCE: DE NOVO PLANNING GROUP, 2024.

Overall, for all the reasons described above, the proposed Project would be consistent with the applicable City of Clovis General Plan policies.

CLOVIS ZONING CODE

The Clovis Zoning Code implements the General Plan. The Project site is currently within the jurisdiction of Fresno County. The Fresno LAFCo will require the Project site to be pre-zoned by the City of Clovis in conjunction with the proposed annexation. The portion of the Project site that is outside of the Master Plan area would not receive pre-zoning designations:

The Project contemplates a pre-zoning request for the Master Plan area to the following City of Clovis zone districts: R-1, R-1-MD, R-2, R-4, C-1, C-R, M-1 and O. Since all these zone districts are within the M-P-C Overlay District, they would include the M-P-C suffix and subject to the development standards as modified and adopted in the Master Plan.

- **Single Family Residential Low-Density Zoning (R-1):** This designation identifies areas appropriate for conventional single-family uses. The allowable density range is 2.1 to 5.0 du/acre.

- **Single Family Residential Medium-Density Zoning (R-1-MD):** This designation identifies areas appropriate for single-family uses, including attached and detached single-family structures. The allowable density range is 4.1 to 12.0 du/acre.

- **Single Family Residential Medium High-Density Zoning (R-2):** This designation identifies areas appropriate for moderately dense residential uses, including multifamily apartments, duplexes, townhouses, and small parcel, attached, and detached single-family uses. The allowable density range is 7.1 to 15.0 du/acre.

- **Multi-Family Residential Very High-Density Zoning (R-4):** This designation identifies areas appropriate for high and very high density residential uses, particularly in association with mixed-use development. The allowable density range is 25.1 to 43.0 du/acre.

- **Neighborhood Commercial Zoning (C-1):** This designation identifies areas appropriate for providing convenience services, compatible with adjacent neighborhood areas.

- **Community Recreation Zoning (C-R):** This designation identifies areas appropriate for commercial recreation into a planned integrated center for the community.

- **Light Industrial Zoning (M-1):** This designation identifies areas appropriate for business parks and industrial uses, including mini-warehouse storage.

- **Open Space and Parks Zoning (O):** This designation identifies areas appropriate for open space, such as parks, flood control channels, greenbelts, parkways, ponding basins, trails, and wildlife preserves.

The proposed City of Clovis zoning for the Project site is shown on Figure 2.0-9.

The pre-zoning would go into effect upon annexation into the City of Clovis. The proposed zone change would ensure that zoning will be consistent with the proposed General Plan designation within the Development Area. The zoning ordinance establishes permitted uses, development densities and intensities, and development standards for each zone to ensure that public health, safety, and general welfare are protected, consistent with the purpose of the Zoning Code. All existing City development standards and zoning requirements for the proposed zoning are applicable to any activities on the Project site. The City will review each component of the proposed Project as plans (improvement plans, building plans, site plans, etc.) are submitted for final approval to ensure that they are consistent with the City's Zoning ordinance. Approval of the pre-zoning will ensure that the proposed Project will be consistent with the Zoning Code and will have a **less than significant** impact relative to this topic, and no mitigation is required.

FRESNO LAFCO

The Project site is currently in an unincorporated portion of Fresno County, adjacent to the City of Clovis City limits, outside the Clovis SOI (as defined in the Clovis General Plan). The proposed Project includes an annexation of approximately 507 acres, which covers the entire boundary of the proposed Master Plan. The annexation does not include the approximately 445-acre Non-Development Area. The final annexation boundary may be refined as part of the study process, which would ultimately include a public hearing before Fresno LAFCO, who has the final statutory authority to set annexation boundaries.

LAFCo is serving as a responsible agency for this EIR pursuant to their Annexation Policies and Procedures. When LAFCo is a Responsible Agency under CEQA, in order to approve the annexation, the Commission will certify that it has reviewed the Lead Agency's environmental documents and, if required, adopt findings for approval and statements of overriding considerations in accordance with Sections 15091 and 15903 of the CEQA Guidelines.

The Fresno LAFCo will review the proposed annexation for consistency with the Annexation Policies and Procedures. These policies and procedures govern Fresno LAFCo determinations regarding annexations to all agencies. The following policies will be reviewed as part of the annexation process by the Fresno LAFCo.

1. The annexation program is consistent with LAFCo's SOI for the City.

Suggested actions:

- City and county shall reach agreement on development standards and planning and zoning requirements within the sphere to ensure that development within the sphere occurs in a manner that reflects the concerns of the affected City and is accomplished in a manner that promotes the logical and orderly development of areas within the sphere. GC §56425
- City responds to a request to extend service outside of its City limits and SOIs in consultation with GC §56133 and Fresno LAFCo policy.

Project discussion:

The proposed Project includes an annexation of approximately 507 acres, which covers the entire boundary of the proposed Master Plan. The annexation does not include the approximately 445-acre Non-Development Area. The amendment of the City's SOI will require an application and approval by the Fresno LAFCo. The SOI amendment would be reviewed by the City and LAFCo prior to proceeding with the requested annexation. If the SOI Amendment is approved, the Project would then be able to begin the annexation process.

2. The annexation program clearly implements the City's general plan.

Suggested actions:

- City annexation applications shall describe how the proposal implements the City's general plan, and support these statements with information from other official sources such as the annual budget, capital improvement plan, and so forth.
- A prezoning ordinance shall not be encumbered with extraneous conditions that preclude the ordinance's effective date by the time of LAFCo hearing on the annexation.

Project discussion:
The proposed Project includes the adoption of pre-zoning for the proposed annexation area, which will serve to regulate the uses of land and structures within the Project area. The Project site is currently located outside of the Clovis City limits, and therefore, does not have City-designated zoning. The proposed Project includes a request for pre-zoning within the Master Plan to appropriate City of Clovis zone districts (Figure 2.0-9). The portion of the Project site that is outside of the Master Plan area would not receive pre-zoning designations.

Master Plan: The Project contemplates a pre-zoning request for the Master Plan area to the following City of Clovis zone districts: R-1, R-1-MD, R-2, R-4, C-1, C-R, M-1 and O. Since all these zone districts are within the M-P-C Overlay District, they would include the M-P-C suffix and subject to the development standards as modified and adopted in the Master Plan.

The proposed City of Clovis zoning for the Project site is shown on Figure 2.0-9. The Project will be subject to the development standards as described in the Municipal Code, to ensure consistency between land use and zoning designations.

3. The annexation program emphasizes the use of cities' resolution of application versus property owner/registered voter petitions.

Suggested action:

- For the City to consider opposing property owner petition-initiated reorganizations as these would not have proceeded through the process of City development review and approval, which is an important step in the management of a City's general plan.

Project discussion:
No opposing property owner petition-initiated reorganizations exist for this Project.

4. The annexation program supports orderly growth by identifying areas to be annexed, general time frames for growth, and a plan for extension of services to these areas.

Suggested actions:

- Capital improvement plan and/or facilities plans include all lands within the SOI;
- Development impact fees that fund the extension of services are established and maintained;
- Impacts to service delivery are assessed in the City's EIR or project-specific CEQA documents and appropriately-scaled mitigation is approved and implemented.
- The City coordinates its public policy documents in support of the annexation program.

Project discussion:
This EIR assesses service capacity and demands for utilities services and public services. There are no service deficiencies noted by the City of Clovis, or contained within this EIR that are anticipated to occur after installation of infrastructure. The Project site is also designated for residential uses by the City's General Plan.

5. The annexation program anticipates changes of organization of existing service districts and service areas in the SOI or adjacent to the SOI.

Suggested action:

- The Program should describe the transition of services that will occur when the City annexes/detaches (CID, NCFPD, FCFPD, KRCD, etc.); inversely, the document describes the status of or continuation of services when annexations do not result in detachment (FID, FMFCD, etc.).

Project discussion:
As noted previously, this EIR assesses service capacity and demands for utilities services and public services. There are no service deficiencies noted by the City of Clovis, or contained within this EIR that are anticipated to occur after installation of infrastructure. The Project site is also designated for residential uses by the City's General Plan.

6. The annexation program anticipates the location of Disadvantaged Unincorporated Communities (DUC) within a City's sphere of influence.

Suggested action:

- Cities should become proficient in implementing their responsibilities under Senate Bill 244, should review Fresno LAFCo DUC policy and review Senate Bill 244 Technical Advisory.

Project discussion:
The Project site is not located in or adjacent to a DUC.

7. The annexation program informs citizens in annexation areas of their rights, benefits, and changes that will occur on annexation.

Suggested actions:

- City to establish and maintain on its website a description of the information above, how citizens can engage the process, how the City engages citizens and stakeholders and other information related to annexation. This information should include a description of the SOI, protest processes, and how LAFCo is involved.
- For those portions of a City's SOI that contain a large number of rural residential parcels that are planned for urban uses, the City is strongly encouraged to develop a long-term plan to annex and serve these areas.

Project discussion:
As noted previously, the Draft EIR assesses service capacity and demands for utilities services and public services. There are no service deficiencies noted by the City of Clovis, or contained within this EIR that are anticipated to occur after installation of infrastructure. The Project site is also designated for Urban Center uses by the City's General Plan. It is noted, however, the proposed annexation area was not included in the City's latest Municipal Service Review.

8. The annexation program will be coordinated with LAFCo's Municipal Services Review (MSR) for the City.

Suggested action:

- City applications should include an assessment of current MSR determinations and recommendations.

Project discussion:
As noted previously, this EIR assesses service capacity and demands for utilities services and public services. There are no service deficiencies noted by the City of Clovis, or contained within this EIR that are anticipated to occur after installation of infrastructure. The Project site is also designated for Urban Center uses by the City's General Plan. It is noted, however, the proposed annexation area was not included in the City's latest MSR.

9. The annexation program is managed by an assigned and responsible City staff member.
Suggested action:

- City identifies a staff member to serve as a genuine point of contact with LAFCo, that is, a staff member responsible and accountable for managing applications, knowledgeable of the project and of LAFCo's process, and empowered to facilitate the City's annexation program.

Project discussion:
This requirement applies to the City and not individual development projects, and as such, is not applicable to the proposed Project.

10. City entitlement analysis is integrated with LAFCo policies.
Suggested action:

- Local agencies, including Fresno County, are strongly advised to include Fresno LAFCo in their initial request for comments.
- When initial planning applications that will eventually require annexation are submitted to cities, they are encouraged to submit a pre-application to LAFCo so that LAFCo can track the project at its beginning and provide comments that would facilitate annexation in time for these to be considered in a timely and efficient manner.

Project discussion:
This City has coordinated with LAFCo through the release of the Notice of Preparation and invitation to the Scoping meeting. The City will ultimately coordinate with LAFCo if the City decides that the Project site should be annexed into the City of Clovis. At that time, the City would submit the appropriate applications and documentations for LAFCo's consideration of the City's annexation approval.

The policies discussed above are intended to ensure orderly reorganization to local jurisdictional boundaries, including annexations. Ultimately, LAFCo will determine whether the proposed annexation would first require an update to the *Clovis Municipal Service Review* in order to approve the annexation. This LAFCo policy was not specifically adopted to avoid or mitigate an environmental effect, rather it is intended to ensure orderly and logical reorganization to local jurisdiction boundaries, including annexations. The proposed Project is consistent with LAFCo policies adopted to address environmental impacts.

As such, implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect, and impacts would be **less than significant.** No mitigation would be required.

Impact 3.10-3: The proposed Project would not induce substantial population growth in an area. (Less Than Significant)

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *The way in which a proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth…It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.*

Based on the CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply or wastewater treatment/collection in an area where this service historically limited growth could be considered growth-inducing.

The State CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth: The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services,

proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

GROWTH EFFECTS OF THE PROJECT

Direct Population Growth: The proposed Project proposes housing that would result in direct population growth. The proposed Project includes the addition of up to 3,286 residential units. Using the most recent Department of Finance (2023) estimate for the average number of persons residing in a dwelling unit in the City of Clovis of 2.84, the addition of 3,286 housing units could increase the population of the City by an estimated 9,333 persons.

FCOG completed growth projections through 2050 to assist with updating the 2020 RTP/SCS, accounting for each city's long-term development capacity based on adopted general plans. FCOG's projections suggest a continuation of the historic trend of an increasing percentage of population growth occurring in Fresno County's cities, as compared to growth in unincorporated areas, with approximately 96.9 percent of the population change projected to occur in City SOIs. Population growth from 2015 through 2050 is anticipated to be approximately 15 percent in the unincorporated areas and 52.7 percent in the Fresno County's cities.[32]

Based on FCOG's projections for the City of Clovis, the population is anticipated to be 153,490 in 2035 and 177,210 in 2050. For the entirety of Fresno County, the population is forecasted to be 1,258,480 in 2035 and 1,447,100 in 2050. As such, the anticipated increase of 9,333 persons resulting from Project implementation would result in approximately 6.1 percent of Clovis' forecasted growth in 2035 and approximately 5.3 of Clovis' forecasted growth in 2050. With respect to the County's population, Project implementation would result in approximately 0.7 percent of the County's forecasted growth in 2035 and approximately 0.6 percent of the County's forecasted growth in 2050. Project-related growth has already been factored into anticipated and forecasted growth within the City of Clovis and Fresno County, and the relatively small portion of growth resulting from Project implementation would not result in substantial unplanned growth in the City or region. As such, Project-related effects on direct population growth would result in a **less than significant** impact, and no mitigation would be required.

Indirect Population Growth: The proposed Project requires adjustments to the land uses within the Master Plan area. The proposed General Plan land use designation for the Master Plan area is Mixed Use Village. The Mixed Use Village land use designation would allow for the development of a master

[32] County of Fresno Department of Public Works and Planning, Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update, Fresno County, California, April 2023. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/planning-and-land-use/general-plan/1_draft-program-environmen-1.pdf. Accessed January 2024.

planned community through multiple zoning designations, including the Master Plan Community Overlay District. The proposed modification to the original boundaries of the City of Clovis General Plan Focus Area 13 would memorialize the 507-acre Master Plan as a subarea of Focus Area 13. This application is not intended to eliminate the greater Focus Area 13 established under the General Plan; rather, it would create a new Focus Area designation (Focus Area 13a) to establish and refine specific development goals and policies for this portion of Focus Area 13. Refer to Figure 2.0-8.

Projects that include employment generating uses have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. As noted in Chapter 2.0, Project Description, the Project contemplates a pre-zoning request for the Master Plan area to the following City of Clovis zone districts: R-1, R-1-MD, R-2, R-4, C-1, C-R, M-1 and O. Uses within the M-1 (Light Industrial), C-1 (Neighborhood Commercial), and C-R (Community Recreation) zones would create jobs, as envisioned by the City of Clovis

In addition, the proposed infrastructure improvements would be adequately sized to serve the proposed Project only. The proposed infrastructure would not be oversized to accommodate any growth beyond the Project site into areas that were not previously served. While the proposed Project will result in growth, it is not anticipated to significantly induce growth. Implementation of the proposed Project would not result in significant unplanned growth, and impacts would be **less than significant**. No mitigation would be required.

Impact 3.10-4: The proposed Project would not displace substantial numbers of people or existing housing. (Less Than Significant)

Presently, the Project site consists of a combination of fallow and grazing land, several rural residences, offices and Contractor's Corp Yard and small tree nursery. Implementation of the Project would increase housing in the area by up to 3,286 residential units. As such, and due to the small number of existing residences, the proposed Project would not displace substantial numbers of people or existing housing. Therefore, the proposed Project will have **less than significant** impact related to the displacement of substantial numbers of people or existing housing, and no mitigation would be required.

This section provides a general description of the existing noise sources in the Project vicinity, a discussion of the regulatory setting, and identifies potential noise impacts associated with the proposed Project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment. Mitigation measures have been identified for significant noise-related impacts.

Information in this section is derived in part from the Vista Ranch Project Noise Impact Study, City of Clovis, prepared by MD Acoustics, LLC, dated April 18, 2024, and is included in Appendix H.

This section is also based on the following:

- *City of Clovis General Plan (2014);*
- *City of Clovis Municipal Code;*
- *Fresno County General Plan (2000); and*
- *Fresno County Code of Ordinances*.

One comment was received related to this environmental topic from the County of Fresno Department of Public Health Environmental Health Division dated February 29, 2024. The comment recommended preparation of a noise study, which has already been prepared for the proposed Project. All comments received during the Project review and NOP period are included in Appendix A.

3.11.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response. A-weighted dB values are expressed as dBA.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7:00 p.m. to 10:00 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.

Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
L_{dn}	Day/Night Average Sound Level. Like CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50 percent of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
SEL	Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected, or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as zero dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dB) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase

of 10 dB is generally perceived as a doubling in loudness. For example, a 70-dB sound is half as loud as an 80-dB sound, and twice as loud as a 60-dB sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a plus 10-dB weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is like L_{dn}, but includes a plus five-dB penalty for evening noise. Table 3.11-1 lists several examples of the noise levels associated with common situations.

TABLE 3.11-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	*NOISE LEVEL (DB)*	*COMMON INDOOR ACTIVITIES*
	--110--	Rock Band
Jet Fly-over at 300 meter (m) (1,000 feet (ft))	--100--	
Gas Lawn Mower at one m (three ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at one m (three ft) Garbage Disposal at one m (three ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at three m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at one m (three ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. Regarding increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a one dB change cannot be perceived;
- Outside of the laboratory, a three-dB change is considered a just-perceivable difference;
- A change in level of at least five-dB is required before any noticeable change in human response would be expected; and
- A 10-dB change is subjectively heard as approximately a doubling in loudness and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately six dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE AND VIBRATION ENVIRONMENTS

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the Project Vicinity, nine 15-minute ambient noise measurements were conducted at or near the Project site. The noise measurements were taken to determine the existing ambient noise levels. Noise data indicates that traffic along Shepherd Avenue is the primary source of noise impacting the Project site and the adjacent uses. The results of the short-term noise data are presented in Table 3.11-2.

The maximum value (L_{max}) represents the highest noise level measured during an interval. The average value (L_{eq}) represents the energy average of all the noise measured during an interval. The median value (L_{50}) represents the sound level exceeded 50 percent of the time during an interval.

TABLE 3.11-2: EXISTING SHORT-TERM NOISE MEASUREMENT DATA

NOISE MEASUREMENT LOCATION	TIME	AVERAGE MEASURED HOURLY NOISE LEVELS, DB(A)							
		L_{EQ}	L_{MAX}	L_{MIN}	L_2	L_8	L_{25}	L_{50}	L_{90}
ST1	7:53 a.m.	46.4	68.0	38.0	53.3	46.9	45.2	43.9	41.6
ST2	8:27a.m.	69.1	82.2	55.7	77.4	72.0	68.7	66.4	62.6
ST3	9:01 a.m.	46.0	63.5	34.5	56.8	48.8	39.4	37.3	35.6
ST4	9:45 a.m.	39.0	57.9	29.0	47.6	41.9	36.7	33.3	30.4
ST5	10:08 a.m.	69.0	79.6	43.1	77.5	74.4	69.3	63.7	52.1
ST6	11:10 a.m.	68.2	81.6	39.7	77.9	74.1	66.5	58.5	47.2
ST7	11:48 a.m.	45.2	67.2	32.4	53.2	44.7	37.8	36.1	34.1
ST8	12:39 p.m.	48.7	70.6	32.6	57.0	50.0	41.8	38.5	34.8
ST9	1:09 p.m.	70.1	83.6	39.2	80.3	74.9	67.0	59.8	47.9

SOURCE: MD ACOUSTICS, 2024.

Noise data shown in Table 3.11-2 above indicates the ambient noise level ranged from 39 to 70 dBA L_{eq} at the Project site. Maximum levels reached up to 69 dBA at location ST5 because of traffic along Shepherd Avenue and up to 70 dBA at location ST9 due to jet passbys and heavy traffic along Behymer Avenue and Fowler Avenue.

Construction Vibration

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{equipment} = PPV_{ref} (100/D_{rec})^n$$

Where: PPV_{ref} = reference PPV at 100 feet
D_{rec} = distance from equipment to receiver in feet
n = 1.1 (the value related to the attenuation rate through ground)

Table 3.11-3 gives approximate vibration levels for construction activities. This data provides a reasonable estimate for a wide range of soil conditions.

TABLE 3.11-3: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

EQUIPMENT	*PEAK PARTICLE VELOCITY (INCHES/SECOND) AT 25 FEET*	*APPROXIMATE VIBRATION LEVEL LV (DVB) AT 25 FEET*
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

SOURCE: TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT, FEDERAL TRANSIT ADMINISTRATION, MAY 2006.

The thresholds from the California Department of Transportation (Caltrans) Transportation and Construction Induced Vibration Guidance Manual in Table 3.11-4 provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

TABLE 3.11-4: GUIDELINE VIBRATION DAMAGE POTENTIAL THRESHOLD CRITERIA

STRUCTURE AND CONDITION	*MAXIMUM PPV (IN/SEC)*	
	TRANSIENT SOURCES	*CONTINUOUS/FREQUENT INTERMITTENT SOURCES*
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

NOTES:

TRANSIENT SOURCES CREATE A SINGLE ISOLATED VIBRATION EVENT, SUCH AS BLASTING OR DROP BALLS. CONTINUOUS/FREQUENT INTERMITTENT SOURCES INCLUDE IMPACT

PILE DRIVERS, POGO-STICK COMPACTORS, CRACK-AND-SEAT EQUIPMENT, VIBRATORY PILE DRIVERS, AND VIBRATORY COMPACTION EQUIPMENT.

SOURCE: TABLE 19, TRANSPORTATION AND CONSTRUCTION VIBRATION GUIDANCE MANUAL, CALTRANS, SEPT. 2013.

3.11.2 REGULATORY SETTING

FEDERAL

There are no federal regulations related to noise that apply to the proposed Project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a Project exposes persons to noise or vibration levels more than local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA standards are discussed more below under the Thresholds of Significance section.

California State Building Codes

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room.

Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

CITY OF CLOVIS

The City of Clovis General Plan

The City of Clovis General Plan Noise Element contains goals, policies, and implementation measures for assessing noise impacts within the City, and as outlined in Table ES-1 of the General Plan. Listed below are the noise goals, policies, and implementation measures that are applicable to the proposed Project:

Polices: Noise Element

- Policy 3.1: Land use compatibility. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the Noise Level Exposure and Land Use Compatibility Matrix and the City's noise ordinance.
- Policy 3.2: Land use and traffic patterns. Discourage land use and traffic patterns that would expose sensitive land uses or noise-sensitive areas to unacceptable noise levels.

- Policy 3.3: New residential. When new residential development is proposed adjacent to land designated for industrial or commercial uses, require the proposed development to assess potential noise impacts and fund feasible noise-related mitigation measures.
- Policy 3.4: Acoustical study. Require an acoustical study for proposed projects that have the potential to exceed acceptable noise thresholds or are exposed to existing or future noise levels in excess of the thresholds in the City's noise ordinance.
- Policy 3.5: Site and building design. Minimize noise impacts by requiring appropriate site, circulation, equipment, and building design, and sound walls, landscaping, and other buffers.
- Policy 3.6: Noise impacts. Minimize or eliminate persistent, periodic, or impulsive noise impacts of business operations.
- Policy 3.7: Mixed-use buildings. Require that mixed-use structures be designed to prevent transfer of noise and vibration between uses.
- Policy 3.8: Existing uses. Require the use of noise abatement devices for existing uses that exceed acceptable noise thresholds.
- Policy 3.9: Caltrans facilities. Coordinate with Caltrans to ensure the inclusion of noise mitigation measures in the design of new highway projects or improvements to existing facilities.
- Policy 3.10: Airport changes. Coordinate with the Fresno Yosemite International Airport to minimize noise impacts on properties in Clovis due to changes in flight patterns or airport expansion.
- Policy 3.11: Airport land use compatibility. Approve land uses in a manner that is consistent with the Fresno Yosemite International Airport Land Use Compatibility Plan.
- Policy 3.12: Truck traffic. Plan and maintain truck routes that avoid noise-sensitive land uses and areas. Encourage business delivery areas to be located away from residential properties and to mitigate associated noise impacts.
- Policy 3.13: Small aircraft and helicopters. Minimize the noise impact of small aircraft and helicopters on residential neighborhoods.
- Policy 3.14: Control sound at the source. Prioritize using noise mitigation measures to control sound at the source before buffers, soundwalls, and other perimeter measures.

The guidelines rank noise land use compatibility in terms of clearly compatible, normally compatible, normally incompatible, and clearly incompatible as illustrated in Clovis General Plan Noise Element Exhibit D [Table 3.11-5].

TABLE 3.11-5: LAND USE AND NOISE COMPATIBILITY MATRIX

LAND USE	*ENERGY AVERAGE (CNEL)*						
	<	*55*	*60*	*65*	*70*	*75*	*80>*
Amphitheater, concert hall, auditorium, meeting hall	B	B	C	C	D	D	D
Mobile home	A	A	B	C	C	D	D
Hospital, library, school, faith/religious uses	A	A	B	C	C	D	D
Hotel, motel, transient lodging	A	A	B	B	C	C	D
Single family, multifamily, faith/religious uses	A	A	B	B	C	D	D
Parks	A	A	A	B	C	D	D
Office building, research & development, professional office, city office building, and hotel	A	A	A	B	B	C	D
Amusement Park, miniature golf, go-cart track, health club, equestrian center	A	A	A	B	B	D	D
Golf courses, nature centers, cemeteries, wildlife reserves, wildlife habitat	A	A	A	A	B	C	C
Commercial retail, bank, restaurant, movie theater	A	A	A	A	B	B	C
Automobile service station, auto dealer, manufacturing, warehousing, wholesale, utilities	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

SOURCE: CITY OF CLOVIS GENERAL PLAN, NOISE ELEMENT, EXHIBIT D.

City of Clovis Municipal Code Noise Ordinance

Chapter 9.22.080 and 9.22.100 General Performance Standards of the City's Municipal Code outlines the City's noise and vibration ordinances.

9.22.080 - NOISE

The following noise standards, unless otherwise specifically indicated, shall apply to all property with a designated noise zone. Maximum Exterior Noise Standards and Maximum Interior Noise Standards are provided in Table 3.11-6 and Table 3.11-7, respectively.

TABLE 3.11-6: MAXIMUM EXTERIOR NOISE STANDARDS

NOISE ZONE	*TYPE OF LAND USE*	*ALLOWABLE EXTERIOR NOISE LEVEL (15-MINUTE LEQ)*	
		7 A.M. TO 10 P.M.	*10 P.M. TO 7 A.M.*
I	Single-, two- or multiple-family residential	55 dBA	50 dBA
II	Commercial	65 dBA	60 dBA
III	Residential portions of mixed-use properties	60 dBA	50 dBA
IV	Industrial or manufacturing	70 dBA	70 dBA

SOURCE: SECTION 9.22.080, CLOVIS MUNICIPAL CODE.

TABLE 3.11-7: MAXIMUM INTERIOR NOISE STANDARDS

NOISE ZONE	TYPE OF LAND USE	ALLOWABLE INTERIOR NOISE LEVEL (15-MINUTE LEQ)	
		7 A.M. TO 10 P.M.	10 P.M. TO 7 A.M.
I	Residential	45 dBA	40 dBA
II	Administrative/professional office	50 dBA	--
III	Residential portions of mixed-use properties	45 dBA	40 dBA

SOURCE: SECTION 9.22.080, CLOVIS MUNICIPAL CODE.

If the ambient noise level exceeds the resulting standard, the ambient shall be the standard.

It is unlawful for any person to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any property measured at the property line, to exceed either of the following within the incorporated area of the City:

- The noise standard for the applicable zone for any 15-minute period;
- A maximum impulsive noise level equal to the value of the noise standard plus 20 dBA for any period (measured using A-weighted slow response). Impulsive noise which repeats four or more times in any hour between 10:00 p.m. and 7:00 a.m. shall be measured as continuous sound and meet the noise standard for the applicable zone.

When properties of two different noise zones abut one another, the maximum exterior noise level shall be the lower of the two noise zones where one zone is residential, and in other contexts shall be the average of the two zones.

Commercial, industrial, and recreational uses which create impulsive noise as part of their regular processes, such as using pile drivers, forge hammers, punch presses, and gunshots, shall not be in any zone district adjacent to a residential zone district unless a noise study is completed demonstrating the impulsive noise does not exceed the standards at the property line for the residential zone district. Impulse noise from these uses shall be measured as continuous sound. The noise study shall be subject to review and approval by the Director or his or her designee, and shall be completed as part of any discretionary permit process for the use or prior to obtaining a building permit. This provision shall not apply to uses existing on the effective date of the ordinance codified in this title.

Emergency electrical generators in residential zone districts shall comply with the California Building Code and California Residential Code, as amended, for the installation and operation of the emergency generator. Test cycle operation shall be limited to the hours between 10:00 a.m. and 4:00 p.m. Emergency electrical generators are intended to provide emergency power to run air conditioning, medical equipment, and other household appliances in the event of a rolling blackout or other power grid failure.

Measurement of sound levels. Measurement of sound levels shall be as follows:

- Sound level meter. Sound levels shall be measured on the A-weighting network of a sound level meter meeting the requirements of ASA Standards S14-1971 for General Purpose Sound Level Meters, or the latest revision published by the American National Standards Institute, Inc., using the slow meter response. The meter shall be calibrated and used according to the manufacturer's instructions.
- Location of microphone. Measurements shall be taken with the microphone located at any point on the property line of the noise source, but no closer than three feet from any wall and not less than three feet above the ground.
- Minimum of two readings. A minimum of two readings shall be taken for a period of 10 minutes each with 10-minute intervals between measurements. The sound level shall be the average of these readings.

Activities exempt from regulations. The following activities shall be exempt from the provisions of this section:

- Emergency exemption. The emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work.
- Warning devices. Warning devices necessary for the protection of public safety, (e.g., ambulance, fire, and police sirens, and train horns).
- Railroad activities. All locomotives and rail cars operated by a railroad that is regulated by the State Public Utilities Commission.
- Federal or State pre-exempted activities. Any activity, to the extent regulation thereof has been pre-exempted by Federal or State law.
- Pre-existing uses. Uses existing at the time of the effective date of the ordinance codified in this title, which are in compliance with all applicable standards in effect prior to adoption, and which are not otherwise operating as a nuisance in violation of Article 6 of Chapter 27 of Title 5.
- Public health and safety activities. All transportation, flood control, and utility maintenance and construction operations conducted by government entities or utility companies at any time on public rights-of-way, and those situations that may occur on private property deemed necessary to serve the best interests of the public and to protect the public's health and well-being, including, but not limited to: debris and limb removal; removal of damaged poles and vehicles; removal of downed wires; restoring electrical service; repairing traffic signals; repair of water hydrants; repair of mains, gas lines, oil lines, and sewers; repair and maintenance of flood control and storm water facilities; repair and maintenance of streets and sidewalks.
- Ordinary municipal activities. Ordinary municipal activities conducted by the City or other entity having jurisdiction in the City, including, but not limited to: solid waste collection; street sweeping; operation, maintenance, and repair of water production, treatment, and

distribution facilities; operation, maintenance, and repair of sewage treatment, collection, and distribution facilities; and vacuuming catch basins.

- Public safety training activities. Training activities by fire, law enforcement, and public utility officials that cannot reasonably take place within the parameters of this section, including but not limited to training that involves: hydrant testing, pumping hose lays, running chain saws, operating power tools, demolition, vehicle noise, and use of generators.
- Public celebrations. Public celebrations, holidays, or occasions generally celebrated, or public parades held under authorized permits; any sporting event or activity conducted under the direction and supervision of any public or private school.

Acts deemed violations of section. The following acts are a violation of this section:

- Noise-related nuisances defined in Chapter 27 of Title 5. Violations of Article 6 of Chapter 27 of Title 5 pertaining to unlawful noise-related nuisances shall also be considered a violation of this section.
- Construction noise. Construction activities shall be subject to the provisions of Section 5.27.604, which sets forth the permissible hours for construction activity. At all other times, no person shall operate, or cause to be operated, tools or equipment used in alteration, construction, demolition, drilling, or repair work so that the sound creates a noise disturbance across a residential property line, except for emergency work. Stationary equipment (e.g., generators) shall not be located adjacent to any existing residences unless enclosed in a noise attenuating structure, subject to the review and approval of the Director.
- Places of public entertainment. Operating, playing, or allowing the operation or playing of a drum, musical instrument, phonograph, radio, sound amplifier, television, or similar device that produces, reproduces, or amplifies sound in a place of public entertainment at a sound level greater than 95 dBA (read by the slow response on a sound level meter) at any point that is normally occupied by a customer is prohibited, unless conspicuous signs are located near each public entrance, stating "Warning: Sound Levels Within May Cause Hearing Impairment."
- Stationary nonemergency signaling devices. Sounding or allowing the sounding of an electronically amplified signal from a stationary bell, chime, siren, whistle, or similar device intended primarily for nonemergency purposes, from any place, for more than 10 consecutive seconds in any hourly period is prohibited.
- Compacting mechanisms. Operating or allowing the operation of the compacting mechanism of any motor vehicle that compacts refuse and that creates, during the compacting cycle, a sound level more than 85 dBA when measured at 50 feet from any point of the vehicle is prohibited between the hours of 9:00 p.m. and 5:00 a.m.
- Vehicle or motorboat repairs and testing. Repairing, rebuilding, modifying, or testing any motor vehicle, motorcycle, or motorboat in a manner as to cause a noise disturbance across property lines or within a noise-sensitive zone is prohibited.

Responsibility to eliminate or reduce acts deemed violations of section. Improvements to eliminate or reduce negative impacts between uses deemed violations of this section shall be provided by the new use, rather than the existing use.[1]

9.22.100 VIBRATIONS

Uses that generate vibrations that may be considered a nuisance or hazard on any adjacent property shall be corrected, cushioned, or isolated to prevent the continued generation of vibrations. Uses shall be operated in compliance with the following provisions.[2]

- Not perceptible along property line. Uses shall not generate ground vibration that is perceptible without instruments by the average person at any point along or beyond the property line of the parcel containing the activities which generate the vibration;
- No discomfort or annoyance. Uses, activities, and processes shall not generate ground vibration that causes discomfort or annoyance to reasonable persons of normal sensitivity or which endangers the comfort, health, or peace of residents whose property abuts the property lines of the subject parcel.
- No interference. Uses shall not generate ground vibration that interferes with the operations of equipment and facilities on adjoining parcels.
- Temporary construction exempt. Vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks) are exempt from the provisions of this section.

3.11.3 IMPACTS AND MITIGATION MEASURES

STUDY METHOD AND PROCEDURE

The following section describes the noise modeling procedures and assumptions used for this noise impact assessment.

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as the first row of houses
- Locations that are acoustically representative and equivalent to the area of concern

[1] City of Clovis Municipal Code, Title 9. Development Code, Division 3. Development and Operational Standards, Section 9.22.080. Noise. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0922.html#9.22.080. Accessed June 2024.
[2] City of Clovis Municipal Code, Title 9. Development Code, Division 3. Development and Operational Standards, Section 9.22.100. Vibrations. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0922.html#9.22.100. Accessed June 2024.

- Human land usage
- Sites clear of major obstruction and contamination

MD Acoustics conducted the sound level measurements in accordance with the City's and Caltrans's (TeNS) technical noise specifications. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA). The following gives a brief description of the Caltrans Technical Noise Supplement procedures for sound level measurements:

- Microphones for sound level meters were placed five feet above the ground for all measurements
- Sound level meters were calibrated (Larson Davis CAL 200) before and after each measurement
- Following the calibration of equipment, a windscreen was placed over the microphone
- Frequency weighting was set on "A" and slow response
- Results of the long-term noise measurements were recorded on field data sheets
- During any short-term noise measurements, any noise contaminations such as barking dogs, local traffic, lawnmowers, or aircraft fly-overs were noted
- Temperature and sky conditions were observed and documented

Noise monitoring locations were selected based on the nearest sensitive receptors relative to the proposed onsite noise sources. Nine short-term 15-minunte noise measurements were conducted at or near the Project site and are illustrated in Appendix H of this EIR, which includes photos, a field sheet, and measured noise data.

Traffic noise from vehicular traffic was projected using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at the predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Roadway volumes correspond to the Kittelson & Associates traffic counts and segment projections. It is assumed that the peak hour is 10 percent of the ADT. The referenced traffic data was applied to the model and is in Appendix H. The following outlines the key adjustments made to the REMEL for the roadway inputs:

- Roadway classification – (e.g., freeway, major arterial, arterial, secondary, collector, etc.),
- Roadway Active Width – (distance between the center of the outermost travel lanes on each side of the roadway)
- Average Daily Traffic Volumes (ADT), Travel Speeds, Percentages of automobiles, medium trucks, and heavy trucks
- Roadway grade and angle of view
- Site conditions (e.g., soft vs. hard)
- Percentage of total ADT which flows each hour throughout a 24-hour period

Table 3.11-8 indicates the vehicle distribution utilized for this study.

TABLE 3.11-8: TYPICAL NOISE LEVELS

MOTOR-VEHICLE TYPE	*DAYTIME PERCENT (7AM TO 7 PM)*	*EVENING % (7 PM TO 10 PM)*	*NIGHT % (10 PM TO 7 AM)*	*TOTAL % OF TRAFFIC FLOW*
Automobiles	75.5	14.0	10.5	97.42
Medium Trucks	48.9	2.2	48.9	1.84
Heavy Trucks	47.3	5.4	47.3	0.74

SOURCE: MD ACOUSTICS, 2024.

MD Acoustics utilized segment projections from Kittelson & Associates obtained April 2024. The following outlines key adjustments to the REMEL for Project site parameter inputs:

- Vertical and horizontal distances (Sensitive receptor distance from noise source)
- Noise barrier vertical and horizontal distances (Noise barrier distance from sound source and receptor)
- Traffic noise source spectra
- Topography

The construction noise analysis utilizes the FHWA Roadway Construction Noise Model (RNCM), together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the Project site. The Project was analyzed based on the different construction phases. Construction noise is expected to be loudest during the grading, concrete, and building phases of construction. The construction noise calculation output worksheet is in Appendix H.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact related to noise if it will result in:

Would the Project:

a. Generate 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?

b. Generate excessive groundborne vibration or groundborne noise levels?

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?

IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: Operational Noise - The Proposed Project has the potential to generate 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. (Less than Significant with Mitigation)

To predict existing and cumulative noise levels due to traffic, the FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The modeling is theoretical and does not consider any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the levels are shown for comparative purposes only to show the difference between with and without Project conditions. In addition, the noise contours for 55, 60, 65, and 70 dBA CNEL were calculated. The potential off-site noise impacts caused by an increase of traffic from operation of the proposed Project on the nearby roadways were calculated for existing, existing plus Project, cumulative, and cumulative plus Project scenarios.

Table 3.11-9 and Table 3.11-10 compare the existing and existing plus Project and cumulative scenarios. A change of three dB or more is required to have a perceptible difference in noise levels.

TABLE 3.11-9: EXISTING PLUS PROJECT SCENARIO - NOISE LEVELS ALONG ROADWAYS (DBA CNEL)

ROADWAY	*SEGMENT*	*EXISTING*	*EXISTING WITH PROJECT*	
		CNEL @ 50' DBA	*CNEL @ 50' DBA*	*CHANGE IN NOISE LEVEL*
Willow Ave	International Ave to Behymer Ave	72.2	72.0	-0.2
Willow Ave	Behymer Ave to Shepherd Ave	72.4	72.5	0.1
Minnewawa Ave	International Ave to Behymer Ave	68.3	68.6	0.3
Minnewawa Ave	Behymer Ave to Shepherd Ave	66.7	66.6	-0.1
Clovis Ave	Shepherd Ave to Nees Ave	66.1	67.8	1.7
Clovis Ave	Nees Ave to Alluvial Ave	69.0	68.9	-0.1
Clovis Ave	Alluvial Ave to Herndon Ave	70.7	70.4	-0.3
Sunnyside Ave	Shepherd Ave to Nees Ave	61.8	63.8	2.0
Sunnyside Ave	Nees Ave to Alluvial Ave	64.7	66.7	2.0
Sunnyside Ave	Alluvial Ave to Herndon Ave	66.4	68.0	1.6
Fowler Ave	Shepherd Ave to Teague Ave	65.7	67.0	1.3
Fowler Ave	Teague Ave to Nees Ave	66.8	67.6	0.5
Fowler Ave	Nees Ave to Alluvial Ave	68.3	68.2	-0.1
Fowler Ave	Alluvial Ave to SR 168 WB Ramps	70.0	70.0	0.0
Temperance Ave	Shepherd Ave to Nees Ave	66.6	68.4	1.8

ROADWAY	SEGMENT	EXISTING	EXISTING WITH PROJECT	
		CNEL @ 50' DBA	CNEL @ 50' DBA	CHANGE IN NOISE LEVEL
Temperance Ave	Nees Ave to Alluvial Ave	72.2	72.0	-0.2
Temperance Ave	Alluvial Ave to SR 168 WB Ramps	72.4	72.5	0.1
Locan Ave	Shepherd Ave to Nees Ave	68.3	68.6	0.3
De Wolf Ave	Shepherd Ave to Owens Mountain Pkwy	66.7	66.6	-0.1
Behymer Ave	Willow Ave to Minnewawa Ave	66.1	67.8	1.6
Behymer Ave	Minnewawa Ave to Fowler Ave	69.0	68.9	0.0
Shepherd Ave	Willow Ave to Minnewawa Ave	70.7	70.4	-0.3
Shepherd Ave	Minnewawa Ave to Clovis Ave	61.8	63.8	2.0
Shepherd Ave	Clovis Ave to Sunnyside Ave	64.7	66.7	2.1
Shepherd Ave	Sunnyside Ave to Fowler Ave	66.4	68.0	1.6
Shepherd Ave	Fowler Ave to Temperance Ave	65.7	67.0	1.3
Shepherd Ave	Temperance Ave to Locan Ave	66.8	67.6	0.8
Shepherd Ave	Locan Ave to De Wolf Ave	68.3	68.2	0.0
Shepherd Ave	De Wolf Ave to SR 168	70.0	70.0	0.0
Nees Ave	Clovis Ave to Sunnyside Ave	66.6	68.4	1.8
Nees Ave	Sunnyside Ave to Fowler Ave	70.3	70.9	0.6
Nees Ave	Fowler Ave to Temperance Ave	71.4	72.5	1.1
Nees Ave	Temperance Ave to Locan Ave	60.1	64.4	4.3
Alluvial Ave	Clovis Ave to Sunnyside Ave	62.0	63.4	1.4
Alluvial Ave	Sunnyside Ave to Fowler Ave	65.7	66.5	0.8
Alluvial Ave	Fowler Ave to Temperance Ave	67.9	69.0	1.1
Herndon Ave	SR 168 to Clovis Ave	69.4	68.6	-0.8
Herndon Ave	Clovis Ave to Sunnyside Ave	69.1	68.5	-0.5

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM MD ACOUSTICS. 2024.

When comparing existing plus Project levels to existing levels, Nees Avenue from Temperance Avenue to Locan Avenue (located within the City of Clovis) has the potential for a significant impact as the only roadway segment with an increase of more than three dBA. However, the Project will stay within normally compatible levels for single family residential as outlined in the General Plan Land Use Compatibility Matrix; therefore, this would not be considered an impact.

TABLE 3.11-10: CUMULATIVE SCENARIO - NOISE LEVELS ALONG ROADWAYS (DBA CNEL)

ROADWAY	SEGMENT	CUMULATIVE	CUMULATIVE WITH PROJECT	
		CNEL @ 50' DBA	CNEL @ 50' DBA	CHANGE IN NOISE LEVEL
Willow Ave	International Ave to Behymer Ave	73.6	73.4	-0.2
Willow Ave	Behymer Ave to Shepherd Ave	73.7	73.7	0.1
Minnewawa Ave	International Ave to Behymer Ave	65.7	66.2	0.5
Minnewawa Ave	Behymer Ave to Shepherd Ave	63.4	63.2	-0.2
Clovis Ave	Shepherd Ave to Nees Ave	69.4	70.2	0.9
Clovis Ave	Nees Ave to Alluvial Ave	70.5	70.5	0.0
Clovis Ave	Alluvial Ave to Herndon Ave	71.9	71.7	-0.2
Sunnyside Ave	Shepherd Ave to Nees Ave	65.6	66.5	0.9
Sunnyside Ave	Nees Ave to Alluvial Ave	68.5	69.5	1.0
Sunnyside Ave	Alluvial Ave to Herndon Ave	67.6	68.9	1.2
Fowler Ave	Shepherd Ave to Teague Ave	68.8	69.5	0.7
Fowler Ave	Teague Ave to Nees Ave	69.7	70.2	0.4
Fowler Ave	Nees Ave to Alluvial Ave	70.2	70.2	0.0
Fowler Ave	Alluvial Ave to SR 168 WB Ramps	71.0	71.0	0.0
Temperance Ave	Shepherd Ave to Nees Ave	68.5	69.7	1.2
Temperance Ave	Nees Ave to Alluvial Ave	69.6	70.3	0.7
Temperance Ave	Alluvial Ave to SR 168 WB Ramps	72.4	73.3	0.9
Locan Ave	Shepherd Ave to Nees Ave	60.7	64.6	4.0
De Wolf Ave	Shepherd Ave to Owens Mountain Pkwy	62.4	63.7	1.3
Behymer Ave	Willow Ave to Minnewawa Ave	67.6	68.2	0.5
Behymer Ave	Minnewawa Ave to Fowler Ave	68.4	69.4	1.0
Shepherd Ave	Willow Ave to Minnewawa Ave	71.6	71.1	-0.5
Shepherd Ave	Minnewawa Ave to Clovis Ave	70.3	69.9	-0.4
Shepherd Ave	Clovis Ave to Sunnyside Ave	71.6	71.1	-0.5
Shepherd Ave	Sunnyside Ave to Fowler Ave	67.5	66.5	-1.0
Shepherd Ave	Fowler Ave to Temperance Ave	69.6	69.3	-0.2
Shepherd Ave	Temperance Ave to Locan Ave	67.5	69.4	2.0
Shepherd Ave	Locan Ave to De Wolf Ave	66.6	68.3	1.8
Shepherd Ave	De Wolf Ave to SR 168	68.8	69.2	0.3
Nees Ave	Clovis Ave to Sunnyside Ave	69.4	70.4	1.0
Nees Ave	Sunnyside Ave to Fowler Ave	68.3	69.0	0.7
Nees Ave	Fowler Ave to Temperance Ave	67.3	68.0	0.8
Nees Ave	Temperance Ave to Locan Ave	63.9	64.7	0.7
Alluvial Ave	Clovis Ave to Sunnyside Ave	67.7	68.0	0.2

ROADWAY	SEGMENT	CUMULATIVE	CUMULATIVE WITH PROJECT	
		CNEL @ 50' DBA	CNEL @ 50' DBA	CHANGE IN NOISE LEVEL
Alluvial Ave	Sunnyside Ave to Fowler Ave	67.2	68.1	0.9
Alluvial Ave	Fowler Ave to Temperance Ave	65.4	66.1	0.7
Herndon Ave	SR 168 to Clovis Ave	87.7	88.0	0.3
Herndon Ave	Clovis Ave to Sunnyside Ave	75.5	75.8	0.3

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM MD ACOUSTICS. 2024.

OPERATIONAL NOISE INCREASES

The proposed Project would include typical residential noise sources, which would be compatible with the adjacent existing residential uses (a.k.a. neighborhood traffic, yard equipment, truck deliveries, garbage collected, etc.). The Project's proposed park uses are located internal to the Project site and would not impact off-site residential uses.

EXTERIOR TRAFFIC NOISE AT PROPOSED USES

The Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Residences along Shepherd Avenue, between Sunnyside Avenue and De Wolf Avenue, will be exposed to levels up to 69.4 dBA CNEL at the respective property lines. These are within the normally compatible levels for residential uses, but above the exterior 65 dBA CNEL standard as outlined in Table ES-1 of the City of Clovis 2014 General Plan.

To meet the exterior residential standards of 65 dBA CNEL, the unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue must be shielded by six-foot sound walls, as required by Mitigation Measure 3.11-1. These walls must be at least 4.2 pounds per square foot (lbs/ft^2). Any unshielded residential glass facades within 80 feet of the centerline of Shepherd Avenue or Sunnyside Avenue directly facing the subject roadway must have a sound transmission class (STC) rating of 30 or more for sound reduction, as required by Mitigation Measure 3.11-2.[3] This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.

Furthermore, as required by Mitigation Measure 3.11-2, any unshielded residential glass facades within 80 ft of the centerline of Shepherd Avenue or Sunnyside Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor windows which would not be shielded by the six-foot sound walls. Implementation of these mitigation measures will ensure that these potential impacts are reduced to a **less than significant** level.

[3] STC rating is a score given to a building's surface (wall, ceiling, window, etc.) based on its ability to reduce sound coming through it.

INTERIOR NOISE IMPACTS AT PROPOSED RESIDENTIAL USES

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dBA CNEL, or less, will typically comply with the City of Clovis 45 dBA CNEL interior noise level standard.

As mentioned before, the Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Compliance with City of Clovis Noise and Vibrations Ordinance and Municipal Code, Chapters 9.22.080 and 9.22.100 would ensure that Project-related noise impacts would be further reduced. Clovis General Plan Noise Element Policies 3.1 to 3.14 include specific mitigation measures and design requirements and guidelines to further reduce potential noise impacts. Therefore, this impact would be **less than significant**.

MITIGATION MEASURE(S)

Mitigation Measure 3.11-1: *A six-foot-tall barrier shall be constructed along all unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue, to achieve the City's exterior noise standards. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials that achieve the required total height. Wood shall not be used due to eventual warping and degradation of acoustical performance. These walls must be at least 4.2 lbs/ft. These requirements shall be included in the improvements plans prior to their approval by the City's Engineering Department.*

Mitigation Measure 3.11-2: *The Project developer will ensure that any unshielded residential glass facades within 80 feet of the centerline of Shepherd Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.*

Impact 3.11-2: Construction Noise – The Proposed Project has the potential to generate 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. (Less than Significant with Mitigation)

CONSTRUCTION NOISE

During the construction of the Project, including roads, water, sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the Project vicinity. Construction noise is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City of Clovis Municipal Code Section 5.27.604. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the Project vicinity.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Noise levels will be the loudest during the grading phase. The modeling assumes construction equipment as close as 25 feet from the adjacent residences and an average of 300 feet away from the adjacent residences. Unmitigated noise levels at 300 feet have the potential to reach 67 dBA L_{eq} and 93 dBA L_{max} at the nearest sensitive receptors during grading. Noise levels for the other construction phases would be lower, approximately from 53 to 66 dBA L_{eq} and 86 to 91 dBA $L_{max.}$

Noise reduction policies within the General Plan Noise Element and standards within the Municipal Code are provided to further reduce construction noise. Mitigation Measure 3.11-3 embodies a preexisting legal requirement from City of Clovis Municipal Code Section 5.27.604 that ensures that construction activities are performed within specific hours. Mitigation Measure 3.11-4 provides specific requirements for attenuating noise during construction. With implementation of Mitigation Measures 3.11-3 and 3.11-4, potential impacts would be **less than significant**.

Mitigation Measure 3.11-3: *Construction activities shall adhere to the requirements of the City of Clovis Municipal Code with respect to hours of operation. This requirement shall be noted in the improvements plans prior to approval by the City's Engineering Division.*

Mitigation Measure 3.11-4: *The contractor shall ensure that the following noise attenuating strategies are implemented during project construction:*

- *During construction, the contractor shall ensure mufflers are properly installed on all construction equipment capable of being outfitted with mufflers.*
- *The contractor shall locate equipment staging areas that will create the greatest distance between construction-related noise and/or vibration sources and sensitive receptors nearest the Project site during all Project construction.*
- *Idling equipment shall be turned off when not in use.*
- *Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.*

Impact 3.11-3: Cumulative Noise – The Proposed Project has the potential to generate 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. (Less than Significant)

To predict existing and cumulative noise levels due to traffic, the FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The modeling is theoretical and does not consider any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the levels are shown for comparative purposes only to show the difference between with and without Project conditions. In addition, the noise contours for 55, 60, 65, and 70 dBA CNEL were calculated. The potential off-site noise impacts caused by an increase of traffic from operation of

the proposed Project on the nearby roadways were calculated for existing, existing plus Project, cumulative, and cumulative plus Project scenarios.

Table 3.11-10 above compares the cumulative without and cumulative with Project scenario and shows the change in traffic noise levels because of the proposed Project. An impact would occur if the Project increased the roadway segment level by three dB or more (an audible difference) and resulting in a future level from clearly compatible to normally compatible or from normally compatible to normally incompatible. When comparing the cumulative plus Project levels, Locan Avenue from Shepherd Avenue to Nees Avenue (located within the City of Clovis) has the potential for a significant cumulative impact as the only roadway segment with an increase of more than three dBA. However, the Project will stay within normally compatible levels for single family residential uses along this segment as outlined in the General Plan Land Use Compatibility Matrix. Therefore, impacts related to cumulative noise would be **less than significant**.

Impact 3.11-4: The proposed Project has the potential to generate excessive groundborne vibration or groundborne noise levels. (Less than Significant)

The construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer or other earthmoving/grading equipment. According to Table 3.11-3, at 25 feet, a vibratory roller would yield a worst-case 0.210 PPV, which means the vibration would only be perceptible when close to the adjacent residential properties but is below any threshold of risk to architectural damage when compared to Table 3.11-4. Furthermore, construction vibration is exempt from the vibration standards per the City of Clovis Municipal Code Section 9.22.100(D). Therefore, impacts related to excessive groundborne vibration or noise levels would be **less than significant**.

Impact 3.11-5: 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. (No Impact)

The Project site is outside the Fresno Yosemite International Airport Contours. There are no private airstrips, public airports, or public use airports within two miles of the Project site. Therefore, there would be no impact.

This section describes and evaluates potential impacts associated with the provision of police protection, fire protection and emergency services, parks and recreation, schools, and other public facilities for the proposed Project. The information in this section is primarily derived from the:

- *City of Clovis General Plan*;
- *City of Clovis 2014 Master Service Plan Update* and supporting documents;
- *City of Clovis Police Department Report to the Community, 2022;*
- *Clovis Fire Department Annual Report, 2022; and*

There were no comments received during the public review period or scoping meeting for the Notice of Preparation related to this environmental topic.

3.12.1 ENVIRONMENTAL SETTING

CITY OF CLOVIS SERVICES

The City of Clovis receives funds for the provision of public services through development impact fees, property taxes, general funds and grants. As land is developed within the City and annexed into the City of Clovis, these fees apply. The City of Clovis periodically reviews these fee structures to ensure that they provide adequate financing to cover the ongoing provision of City services, determine the correct level of adjustment required, and assure funding for needed infrastructure going forward. The City's General Services Department is responsible for continual oversight to ensure that the fee structures are adequate.[1]

Police protection to the unincorporated areas is provided by the Fresno County Sheriff and California Highway Patrol. The City has a mutual aid assistance agreement with both agencies. Continued development and annexation will affect services, but the City has proposed future facilities to accommodate growth. The operations of the Police Department, now and as the City grows, will be funded through the General Fund, Community Facilities District (CFD) fund, and grants.[2]

City of Clovis Police Department

Police protection services in the City of Clovis are provided by the Clovis Police Department (CPD). The CPD operates out of its headquarters located at the Clovis Civic Center at 1233 Fifth Street, in the City of Clovis. As of 2022, the CPD has 109 sworn officers, serving a community of approximately 124,000 citizens. As of 2022, the CPD reached their service rating goal of over 90 percent, with an overall approval rating of 93 percent. Based on this data, the service ratio is

[1] It should be noted that fee laws do not allow any deficits in fees to be made up retroactively.

[2] City of Clovis Department of Planning and Development Services, 2014 Master Service Update Plan. 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2014-Master-Service-Plan.pdf. Accessed January 2024.

approximately 0.88 police officers per 1,000 residents. In 2022, CPD's goal for responding to a Priority 1 call was five minutes, and this goal was achieved, as the average response time was 4.15 minutes.[3]

ORGANIZATION

The Department is organized into four major divisions, which are composed of eight budgetary sections as shown below.[4]

Patrol Division

The Patrol Division is the most highly visible section of the Police Department and is overseen by a Police Captain. Uniformed Patrol, which includes traffic enforcement, a Gang Response Team, the Reserve Unit, and Community Service Officers respond to calls for service and represent the Police Department in their daily contact with the citizens of Clovis. The Patrol Division is also working with all City departments to enforce Municipal Code issues and resolve on-going issues with specific code enforcement. They also deal effectively and appropriately with the criminals they apprehend. The Police Chaplain Program assists the Department and victims of crime during traumatic events or at times of grief. The Patrol Division's aggressive and pro-active approach toward eliminating criminal activity and protecting its citizens has helped create a safe community for the citizens of Clovis.

Planning and Neighborhood Services

Two Police Corporals are assigned to this division and are actively involved in reviewing new construction within the City, oversee alcohol licensing and permits, oversee massage parlors, and practitioners and run the police response to special events in the City.

Communications

The Communications section provides dispatch services for the Police Department and serves as the primary answering point for 9-1-1 calls made from within the City limits. They serve as a resource to police officers, providing automated information as necessary to officers in the field.

Investigations

The Investigations section is responsible for follow-up on all felony cases and preparing the cases for submittal to the District Attorney's Office. The section is divided into two main areas of responsibility: General Investigations and Narcotics. Computer Crime and Identity Theft cases are up significantly (200 percent) and are beginning to take a toll on other general investigators' responsibilities. Narcotics Investigators continue to work with Patrol as a team targeting street

[3] Clovis Police Department Report to the Community, 2022. Available at: https://cityofclovis.com/wp-content/uploads/2023/11/TD_CPD_Report-to-the-Community_2022_DRAFT-1.pdf. Accessed January 2024.

[4] City of Clovis Department of Planning and Development Services, 2014 Master Service Update Plan. 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2014-Master-Service-Plan.pdf. Accessed January 2024.

level dealers and their suppliers. Narcotics Detectives also assist in vice cases and the Gang Response Unit.

Youth Services

The Youth Services unit is charged with providing services to prevent youth from drugs and alcohol abuse and prevent repeat juvenile offenders. Youth Services supports parents to manage their children and to utilize other youth services providers. The Youth Services Division is also responsible for graffiti removal throughout the City.

Support Services

The Support Services unit encompasses diverse duties that focus on providing outstanding service to its customers and the citizens of Clovis. Division sections and functions include Communications/Dispatch, citizen and business services, fleet management, technology, department personnel training, department equipment and supplies management, and Records and Property.

Administrative Services

The Administrative Services Division is the office of the Chief of Police, which provides leadership and general direction and oversight for the entire department. The Administrative Services Division is responsible for several functions including administrative support to the Chief, special projects, research, internal audits and compliance, Homeland Security, grant administration, public information officer duties, employee injury, and oversight of workers' compensation issues. The office support staff also performs a variety of personnel functions regarding recruitment and hiring and also provides support for other division commanders.

Animal Shelter

The Animal Services Division is responsible for responding to calls for service in the community, investigating cruelty to animal cases, operating the Adoption Center and stray animal facility. The Animal Services Division works closely with Clovis veterinarians to achieve the primary goal of increasing the pet adoption rate and educating the public on the importance of reducing the pet population through spaying and neutering.

CRIME STATISTICS

CPD classifies calls for service as Priority 1, Priority 2 or Priority 3. Priority 1 calls are calls where a threat is posed to life or a crime of violence. Priority 2 calls are calls for service where there is an urgency or suspicious behavior. Priority 3 calls are calls for service where no emergency or serious problem is involved. From 2021 to 2022, there was a decrease in Priority 1 call levels, an increase in Priority 2 call levels, and a decrease in Priority 3 call levels. The top 10 incident types increased in 2022 from 2021: Check on Welfare, Alarm, Miscellaneous Investigation, Follow Up, and

Unwanted. The following top 10 incident types decreased in 2022: Assist, Animal Complaint, Disturbance, and Suspicious Activity.[5]

Until 2022, CPD used the Federal Bureau of Investigation's (FBI) Uniform Crime Reporting (UCR) program to share and gather statistics and crime data. In 2022, the FBI required the use of the National Incident-Based Reporting System (NIBRS) instead of the UCR program, and CPD accordingly made the switch to NIBRS in 2022. The primary difference between the UCR program and NIBRS is that UCR only counted the highest and worst crimes, and the NIBRS counts all crimes. The following data reflects charge case counts for all crimes in the City, with the percentage of increase or decrease in the number if charge case counts from 2021 to 2022.[6]

TABLE 3.12-1: CLOVIS CRIME STATISTICS (2021 TO 2022)

CATEGORY/CRIME	*2021*	*2022*	*PERCENT CHANGE*
Assault – Aggravated	187	199	6.42
Assault – Simple	533	563	5.63
Credit Card/Automatic Teller Fraud	167	243	45.51
Drug/Narcotic Violations	654	662	1.22
False Pretenses/Swindle/Confidence Game	111	176	58.56
Impersonation	291	357	22.68
Kidnapping/Abduction	37	47	27.03
Shoplifting	315	335	6.35
Theft – All Other	581	796	37.01
Theft – Motor Vehicle	226	229	1.33
Arson	19	9	-52.63
Burglary/Breaking and Entering	265	233	-12.08
Counterfeiting/Forgery	85	69	-18.82
Drug Equipment Violations (Paraphenalia)	578	558	-3.46
Extortion or Blackmail	8	6	-25.00
Fondling – Forcible	51	44	-13.73
Intimidation	126	118	-6.35
Murder and Nonnegligent Manslaughter	5	2	-60.00
Rape	37	26	-29.73
Rape – Statutory (Nonforcible Sex Offense)	13	10	-23.08
Receipt of Stolen Property	182	139	-23.63
Robbery	52	46	-11.54
Theft from Motor Vehicle	759	618	-18.58
Theft of Vehicle Parts/Accessories	318	262	-17.61
Vandalism/Destruction/Damage of Property	495	431	-12.93

SOURCE: CITY OF CLOVIS AND FBI; CRIMES IN THE CITY OF CLOVIS, 2022.

[5] Clovis Police Department End of Year Report, 2022. Available at: https://cityofclovis.com/wp-content/uploads/2023/03/END-OF-YEAR-REPORT-2022-Public.pdf. Accessed January 2024.

[6] Clovis Police Department End of Year Report, 2022. Available at: https://cityofclovis.com/wp-content/uploads/2023/03/END-OF-YEAR-REPORT-2022-Public.pdf. Accessed January 2024.

As shown in the table, the majority of crimes committed in Clovis consist of property crimes, primarily theft, followed by drug offenses and simple assault. While there was an increase in those crimes from 2021 to 2022, there was a marked decrease in serious crimes, such as murder/nonnegligent manslaughter, arson, and rapes, during the same period.

City of Clovis Fire Department

The Clovis Fire Department (CFD) is responsible for providing fire suppression, technical rescue, hazardous materials spill/release mitigation, emergency medical services (EMS), life safety and enforcement services and emergency preparedness for the citizens of Clovis. This responsibility includes the following functions: fire protection; emergency medical services; urban search and rescue; high angle, trench, water and confined space rescue; hazardous condition mitigation; strategic planning; administration; fire cause and origin investigations; code enforcement; public education; emergency preparedness; disaster response and coordination. These responsibilities are distributed through three divisions – Emergency Operations, Community Risk Reduction, and Administration – which also consist of three auxiliary bureaus.[7]

As of 2023, CFD staff consisted of 70 sworn professional firefighters, fire engineers, fire officers, chief officers, fire inspectors, and administrative staff. The minimum staffing per shift is 19 sworn personnel, consisting of one battalion office, six captains, six engineers, and six firefighters (one chief officer, one truck company and five engine companies). Together, fire and emergency services are provided to approximately 124,000 residents within the CFD's approximately 26-square-service area.[8]

Fire Stations

There are currently six stations in operational use in the City, Stations 1 through 6, in addition to the CFD Headquarters, located at 1233 Fifth Street, and the CFD Training Center, located at 3455 Lind Avenue. Station 2 is currently operating out of the CFD Training Center until the new Station 2 re-opens. The re-opening is anticipated to occur in August of 2024. The CFD fire stations and locations are each listed below.[9]

- Station 1 – 633 Pollasky Avenue
- Station 2 – 2300 Minnewawa Avenue
- Station 3 – 555 North Villa Avenue
- Station 4 – 2427 Armstrong Avenue
- Station 5 – 790 North Temperance Avenue

[7] City of Clovis, About Clovis FD. 2023. Available at: https://cityofclovis.com/fire/about-fd/. Accessed January 2024.

[8] City of Clovis, About Clovis FD. 2023. Available at: https://cityofclovis.com/fire/about-fd/. Accessed January 2024.

[9] City of Clovis, Clovis Fire Department, Annual Report, 2022. Available at: https://cityofclovis.com/wp-content/uploads/2023/03/2022-Annual-Report.pdf. Accessed January 2024.

- Station 6 – 2388 Encino Avenue

The CFD maintains response time goals for various types of calls. The CFD received a total of 12,244 calls in 2022, which have increased since 2022, as shown in Table 3.12.2.

TABLE 3.12-2: CALL VOLUME BY TYPE

INCIDENT TYPE	*2020*	*2021*	*2022*	*3-YEAR AVERAGE*
Emergency Medical	6,566	7,155	7,844	7,188
Good Intent/Service Call	2,097	2,082	2,487	2,222
Fire	386	433	433	417
Hazardous Materials/Explosion	178	200	221	200
Rescues and Vehicle Accidents	397	427	534	453
False Alarm and False Calls	799	614	725	713
Total	**10,274**	**10,911**	**12,244**	**11,143**

SOURCE: CFD ANNUAL REPORT, 2022.

Table 3.12-3 presents CFD response time goals and actual response times. As shown in Table 3.12-3, CFD did not meet its 90th percentile response time goals in 2022; however, with the addition of Station 6, constructed in 2022, response times are anticipated to improve.

TABLE 3.12-3: 90TH PERCENTILE RESPONSE GOALS AND RESPONSE TIME PERFORMANCE

RESPONSE GOAL	*GOAL RESPONSE TIME*	*ACTUAL RESPONSE TIME*
FIRST UNIT ARRIVAL, TOTAL RESPONSE TIME:		
EMS	6 Minutes, 30 seconds	7 Minutes, 35 seconds
MVA/Rescue	7 Minutes	7 Minutes, 31 seconds
Fire	7 Minutes	7 Minutes, 43 seconds
EFFECTIVE RESPONSE FORCE (DAILY STAFFING OF 19):		
Fire	10 Minutes, 30 seconds	11 Minutes, 54 seconds
TURNOUT TIME FOR ALL PRIORITY RESPONSES:	1 Minute, 30 seconds	1 Minute, 36 seconds

SOURCE: CFD ANNUAL REPORT, 2022.

INSURANCE SERVICE OFFICE RATING

The Insurance Services Office (ISO) Public Protection Classification Program currently rates the CFD as a 2 on a scale of 1 to 10, with 1 being the highest possible protection rating and 10 being the lowest. The ISO rating measures individual fire protection agencies against a Fire Suppression Rating Schedule, which includes such criteria as facilities and support for handling and dispatching fire alarms, first-alarm response and initial attack, and adequacy of local water supply for fire-suppression purposes. The ISO ratings are used to establish fire insurance premiums.[10]

[10] City of Clovis, Clovis Fire Department, FAQ. Available at: https://cityofclovis.com/fire/about-fd/fire-faq/. Accessed January 2024.

City of Clovis Parks and Recreation Division

The General Services Department oversees City of Clovis Recreation, which provides a range of services for residents and visitors, such as youth and adult programs, senior services, transit, and other Clovis Recreation programs, including the City of Clovis Batting Cages, Clovis Rotary Skatepark, Adult slow-pitch softball at Clovis Rotary Park, and the youth and adult programs at the Clovis Recreation Center.[11,12] The Parks Division falls under the direction of the Public Utilities Department and is overseen by a full time Parks Manager with a staff of approximately 20 employees. The goal of the Division is to maintain recreational facilities, streetscape, parks, trails, and other landscaped open space areas, City trees, and building grounds.[13]

The City of Clovis Parks division maintains 452 acres of City parks and landscaping, consisting of 81 Parks totaling 173 acres; 263 acres of green belts, street gardens, trails, paseos, and landscaped median islands; 6 acres of building grounds; 12 acres of undeveloped park land and miscellaneous public right-of-way property; approximately 40,000 City street trees; and 28.1 existing miles of trails with 36 miles planned for the future. Four of City parks are jointly maintained by a homeowner's association (HOA). These parks range from passive (Dry Creek Trailhead and Cottonwood) to active (Rotary and Sierra Bicentennial) and are a mix of smaller pocket parks to larger basin parks. All parks are classified as either Pocket Park, Neighborhood Park, Area Park, Community Park, Regional Park, School Park, or Basin Park based on the parks standards outlined by the City. In addition to these facilities, Clovis maintains over 28.1 miles of trails. These trails are comprised of four primary trails (Clovis Old Town Trail, Dry Creek Trail, Enterprise Trail, and Pacific Gas & Electric (PG&E) Trail), as well as a series of greenbelt paths in the northeast corner of the City and paseos in the southeast. The City also has a successful joint-use agreement with Clovis Unified School District (CUSD) that allows for use of school recreational facilities by Clovis residents outside of school hours. These facilities provide numerous athletic fields, gymnasiums and swimming pools for public use.[14]

Types of Parks

All parks are classified as either pocket park, neighborhood park, area park, community park, regional park, basin park, and school park, based on the parks standards outlined by the City. The following is a description of the various City park classifications.[15]

---

[11] City of Clovis, City of Clovis Recreation. Available at: https://cityofclovis.com/general-services/recreation/. Accessed January 2024.

[12] City of Clovis Recreation. Available at: https://cityofclovisrecreation.com/home. Accessed January 2024.

[13] City of Clovis, Parks Master Plan, March 2018. Available at: https://cityofclovis.com/wp-content/uploads/2019/05/Clovis-Parks-Master-Plan-Final-3_19-18.pdf. Accessed January 2024.

[14] City of Clovis, Parks Master Plan, March 2018. Available at: https://cityofclovis.com/wp-content/uploads/2019/05/Clovis-Parks-Master-Plan-Final-3_19-18.pdf. Accessed January 2024.

[15] City of Clovis, Parks Master Plan, March 2018. Available at: https://cityofclovis.com/wp-content/uploads/2019/05/Clovis-Parks-Master-Plan-Final-3_19-18.pdf. Accessed January 2024.

POCKET PARKS

Pocket parks are the smallest park classification. At less than one acre in size, these parks are centrally located in residential neighborhoods and planned for families and children. Pocket parks are intended to offer a small open space recreational venue for more passive recreation internal to a specified residential development. Typically, these parks provide picnic and sitting areas and should be accessible by foot or bicycle. Currently, the City has 1.58 acres of pocket parks in eight locations.

NEIGHBORHOOD PARKS

Neighborhood parks are one to two acres in size and are uniquely tailored to the neighborhoods they serve, providing active recreation and a balance of amenities that appeal to a broad range of individuals. Currently, there are approximately 44.38 acres of neighborhood parks in the City, comprised of 50 parks. Three of these are HOA maintained.

AREA PARKS

Area parks function much like neighborhood parks, but are typically larger, ranging from three to 20 acres, and serve a larger population. These are intended to provide amenities for multiple age groups and connect to neighborhoods via trails or sidewalks. Currently, the City has 11 neighborhood parks totaling approximately 41.99 acres.

COMMUNITY PARKS

Community parks are considerably larger in scale, ranging from 15 to 100 acres, meeting a wide range of community recreation and social needs, focused on both passive and active recreation. The purpose of a community park is to bring people together to recreate, socialize, and find quiet space. Amenities may include similar to a neighborhood park, as well as group picnic facilities, internal trails, and athletic facilities. Currently, the City has five community parks totaling approximately 67.51 acres.

REGIONAL PARKS

Regional parks typically service multiple cities, cross political jurisdictions, and exceed 100 acres in size. The purpose of regional parks is to preserve natural resources, remnant landscapes, and open space. Regional parks can include passive activities, such as hiking and nature viewing, as well as active recreation areas, gardens, picnic facilities, and other special uses. There are currently no existing regional parks in the City of Clovis; however, there are three regional parks beyond the City limits and its SOI, including Woodward Park, Millerton Lake State Recreational Area, and Lost Lake Recreation Area.

BASIN PARK

This classification pertains to Fresno Metropolitan Flood Control basins used in concert with, or in lieu of, other classes of parks to meet open space needs. These sites typically range from five to 20 acres and their uses are generally limited to dry periods due to their main priority as flood control facilities. Basin parks offer connections to the larger community via trails or sidewalks. There are currently three basin parks totaling approximately 21.13 acres.

SCHOOL PARK

School parks are used in concert with, or in lieu-of, other classes of parks to meet open space needs. The City maintains an "open gate" policy for CUSD land and facilities available for recreational use after normal school hours and during the summer. These sites are best suited for community-based recreational programs and youth athletic facilities. Currently there are approximately 271 acres of CUSD school park sites available for shared use.

The inventory of parks for the City of Clovis lists existing facilities found in every park. The parks are organized according to their classification type. Typical facilities within the Clovis Parks include, but are not limited to, playgrounds, benches, grill stations/BBQs, open lawns, and generous tree canopies.

City Parks

City contains approximately 81 parks totaling 173 acres; 263 acres of green belts, street gardens, trails, paseos, and landscaped median islands; 6 acres of building grounds; 12 acres of undeveloped park land and miscellaneous public right-of-way property; approximately 40,000 City-street trees; and 28.1 existing miles of trails with 36 miles planned for the future. The Clovis General Plan establishes a goal of four acres of public parkland per 1,000 residents. Table 3.12-4 summarizes the City's park facilities by category. Table 3.12-4 utilizes the 2023 population of the City, 124,523 persons, to determine the current acreage ratio.

TABLE 3.12-4: SUMMARY OF PARKS AND RECREATION FACILITIES

PARK TYPE	*NUMBER*	*ACREAGE*	*CURRENT RATIO (ACRES PER 1,000 RESIDENTS)*
Pocket Parks	8 locations	1.58	0.013
Neighborhood Parks	50 parks	44.38	0.36
Area Parks	11 parks	41.99	0.34
Community Parks	5 parks	67.51	0.54
Regional Parks	3 sites*	1,238	9.96
Basin Parks	3 parks	21.13	0.17
School Parks	--	271	2.18
TOTAL	**--**	**1,685.6**	**--**

SOURCE: CLOVIS PARKS MASTER PLAN, 2018

**SITES ARE NOT WITHIN CITY BORDER OR SOI BUT SERVICE CLOVIS POPULATIONS*

When the acreage is broken down into functional categories, it displays that the City currently does not meet the park acreage standards for any category. While regional parks acreage surpasses the City's goal of four acres per 1,000 residents, no regional parks are within the City of Clovis; regional parks typically service multiple cities across political jurisdictions. Further, the City has a long-standing joint use agreement with CUSD for use of school district recreational facilities by the public. Due to limited access, these facilities are calculated at half their acreage and facility

quantities in the Level of Service (LOS) analysis.[16] Thus, of the 271 acres of CUSD school playfields, approximately 135 acres are credited toward meeting the City's parkland standard.[17]

The City's Parks Master Plan identifies additional facility needs required over the next five to 10 years. The goal for future planning increases the park area to approximately 380 acres and also substantially increases the number of trails. This amount is approximate and could be met by a combination of utilizing existing undeveloped parkland and acquiring new parkland to develop.

OTHER AGENCY SERVICES

Clovis Unified School District

The City of Clovis and its sphere of influence lies primarily within the CUSD. Only a small portion of the southwest area of the City lies in the Fresno Unified School District (FUSD). A small portion of the southeast area of the proposed sphere of influence lies within the Sanger Unified School District (SUSD). These districts are affected by residential growth in the Clovis area. CUSD is managing growth by financing new facilities through bonds, development fees, and State schools funding.[18]

The CUSD provides school services for grades TK through 12 throughout most of Clovis, 20 percent of Fresno and a small portion of unincorporated Fresno County. The CUSD is approximately 200 square miles and serves more than 42,802 students at 44 comprehensive schools in seven areas, with nine specialty schools and three schools under construction.[19]

Table 3.12-5 provides the CUSD school inventory for K-6 grade schools, 7-8 grade schools, and 9-12 grade schools.[20] Table 3.12-5 does not include the CUSD's education service schools or programs.

---

[16] Level of Service (LOS) standards and analysis is a commonly-used method to examine how well a community's park and recreation needs are being met through a comparison to standards of national, state, and comparable municipality; population size is an important factor for assessing park and recreational needs.

[17] City of Clovis, Parks Master Plan, March 2018. Available at: https://cityofclovis.com/wp-content/uploads/2019/05/Clovis-Parks-Master-Plan-Final-3_19-18.pdf. Accessed January 2024.

[18] City of Clovis Department of Planning and Development Services, 2014 Master Service Update Plan. 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2014-Master-Service-Plan.pdf. Accessed January 2024.

[19] Clovis Unified School District, 2023 Report to the Community. Available at: https://www.cusd.com/AnnualReport.aspx. Accessed January 2024.

[20] California Department of Education, DataQuest, 2023 Enrollment by Grade, Clovis Unified Report (10-62117). Available at: https://dq.cde.ca.gov/dataquest/dqcensus/enrgrdlevels.aspx?agglevel=District&year=2022-23&cds=1062117. Accessed January 2024.

TABLE 3.12-5: PUBLIC SCHOOLS SERVING CLOVIS

SCHOOL	*GRADES SERVED*	*ENROLLMENT 2022-2023 SCHOOL YEAR*	*ADDRESS*
K-6 SCHOOLS			
Bud Rank Elementary	K-6	652	3650 Powers Ave
Cedarwood Elementary	K-6	782	2851 Palo Alto Ave
Century Elementary	K-6	660	965 N Sunnyside Ave
Clovis Elementary	K-6	670	1100 Armstrong Ave
Cole Elementary	K-6	680	615 W Stuart Ave
Copper Hills Elementary	K-6	624	1881 E Plymouth Way, Fresno
Dry Creek Elementary	K-6	950	1273 N Armstrong Ave
Fancher Creek Elementary	K-6	692	5948 E Tulare Ave, Fresno
Fort Washington Elementary	K-6	579	960 E Teague Ave, Fresno
Freedom Elementary	K-6	697	2955 Gettysburg Ave
James S Fugman Elementary	K-6	808	10825 N Cedar Ave, Fresno
Garfield Elementary	K-6	602	1315 N Peach Ave
Gettysburg Elementary	K-6	673	2100 Gettysburg Ave
Janet L. Young Elementary	K-6	655	3140 N Locan Ave, Fresno
Jefferson Elementary	K-6	582	1880 Fowler Ave
Liberty Elementary	K-6	621	1250 E Liberty Hill Rd, Fresno
Lincoln Elementary	K-6	654	774 E Alluvial Ave, Fresno
Maple Creek Elementary	K-6	552	2025 E Teague Ave, Fresno
Mickey Cox Elementary	K-6	640	2191 Sierra Ave
Miramonte Elementary	K-6	567	1590 Bellaire Ave
Mountain View Elementary	K-6	581	2002 E Alluvial Ave
Nelson Elementary	K-6	483	1336 W Spruce Ave, Fresno
Roger S. Oraze Elementary	K-6	840	3468 N Armstrong Ave, Fresno
Pinedale Elementary	K-6	488	7171 North Sugarpine, Fresno
Reagan Elementary	K-6	749	3701 Ashlan Ave
Red Bank Elementary	K-6	795	1454 N Locan Ave
Riverview Elementary	K-6	656	2491 E Behymer Ave, Fresno
Sierra Vista Elementary	K-6	503	510 Barstow Ave
Tarpey Elementary	K-6	653	2700 Minnewawa Ave
Temperance Kutner Elementary	K-6	634	1448 N Armstrong Ave, Fresno

SCHOOL	*GRADES SERVED*	*ENROLLMENT 2022-2023 SCHOOL YEAR*	*ADDRESS*
Valley Oak Elementary	K-6	496	465 E Champlain Dr, Fresno
Virginia R. Boris Elementary	K-6	740	7071 E Clinton Ave, Fresno,
Weldon Elementary	K-6	556	150 Dewitt Ave
Woods Elementary	K-6	685	700 Teague Ave
INTERMEDIATE SCHOOLS			
Alta Sierra Intermediate	7-8	1,284	380 W Teague Ave
Clark Intermediate	7-8	1,462	902 5th St
Granite Ridge Intermediate	7-8	1,118	2770 E International Ave, Fresno
Kastner Intermediate	7-8	1,133	7676 N First St, Fresno
Reyburn Intermediate	7-8	1,643	2901 N De Wolf Ave
HIGH SCHOOLS			
Buchanan High	9-12	2,601	1560 N Minnewawa Ave
Clovis High	9-12	2,905	1055 Fowler Ave
Clovis East High	9-12	2,768	2940 Leonard Ave
Clovis North High	9-12	2,389	2770 E International Ave, Fresno
Clovis West High	9-12	2,089	1070 E Teague Ave, Fresno

SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION 2022-23 ENROLLMENT BY GRADE

As shown in Table 3.12-5, the schools serving the City had a total enrollment of approximately 41,591 students, of which 22,199 were enrolled in elementary (K-6), 6,640 were enrolled in intermediate school (grades 7-8) and 12,752 were enrolled in high school (grades 9 – 12). This total does not include students in CUSD's education service schools, online attendance or alternative programs, and actual attendance is 42,802 students.

Table 3.12-6 provides a summary of the enrollment by grade within CUSD.

TABLE 3.12-6: ENROLLMENT BY GRADE CUSD (2022-2023)

CLOVIS UNIFIED	*GRADE LEVEL*														
	K	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*OTHER PROG-RAMS*	*TOTAL 2022-2023*
***Total Students**	3,382	3,039	2,297	3,125	3,211	3,296	3,339	3,425	3,339	3,425	3,467	3,382	3,382	693	**42,802**
Percent Total	7.9	7.1	7.0	7.3	7.5	7.7	7.8	8.0	7.8	8.0	8.1	7.9	7.9	-	**100%**

SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION 2022-23 ENROLLMENT BY GRADE.
*NOTE: *ROUNDED UP TO THE NEAREST WHOLE NUMBER.*

The CUSD's school building capacity was determined to be 22,766 for grades TK-6, 6,561 for grades 7-8, and 12,135 for grades 9-12. The CUSD does not have existing capacity to accommodate projected students from new development. Therefore, the CUSD will need additional school facilities during the next five years for approximately 263 students in grades TK-6 and 581 students in grades 9-12.[21]

Developer Fees are utilized to enhance and maintain existing facilities; they are also put towards construction and expansion of new facilities. The CUSD adopted Level I and II School Facilities (Developer) Fees in June 2022 of $5.36 per square foot. The 2023 CUSD School Facilities Needs Analysis found that CUSD can justify charging a Level II fee of $5.68 per square foot for residential development, which is an increase of $0.32 per square foot, as compared to the Level II fee implemented in 2022.[22]

Library Services

Library services are provided by Fresno County and funded by the County General Fund and countywide sales tax override. The Fresno County Public Library Clovis Regional Library branch is located in the Clovis Civic Center (1155 Fifth Street). New library facilities are proposed for inclusion in each of the Urban Villages outlined in the 1993 General Plan Update.[23]

The Fresno County Public Library provides collections and services through its Central Resource Library and 34 branches. It is part of the San Joaquin Valley Library System (SJVLS), a cooperative network of 10 public library jurisdictions in the counties of Fresno, Kern, Kings, Madera, Mariposa, Merced and Tulare.[24]

The Clovis branch is 8,627 square feet and is open to the public seven days a week; from 9:00 AM to 9:00 PM Mondays through Thursdays, 9:00 AM to 5:00 PM Fridays and Saturdays, and 12:00 PM to 5:00 PM on Sundays. The Clovis branch has 10 laptops available for checkout and other technologic tools available to the public. The library offers black and white and color printing, as well as a photocopier and a recycling drop-off bin.[25]

---

[21] Odell Planning and Research, Inc., School Facilities Needs Analysis, prepared for Clovis Unified School District, April 2023. Table 6. Available at: https://www.cusd.com/DeveloperFees.aspx. Accessed January 2024.

[22] Odell Planning and Research, Inc., School Facilities Needs Analysis, prepared for Clovis Unified School District, April 2023. Available at: https://www.cusd.com/DeveloperFees.aspx. Accessed January 2024.

[23] City of Clovis Department of Planning and Development Services, 2014 Master Service Update Plan. 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2014-Master-Service-Plan.pdf. Accessed January 2024.

[24] Fresno County Public Library, About the Library. Available at: https://www.fresnolibrary.org/about/index.html. Accessed January 2024.

[25] Fresno County Public Library, Clovis Regional Library. Available at: https://www.fresnolibrary.org/branch/clo.html. Accessed January 2024.

Clovis Senior Center

The Community Services Division administers various senior citizen programs at the Clovis Senior Center, located at 850 Fourth Street between the Clovis Veterans Memorial District Building and the San Joaquin Valley College of Law. The Clovis Senior Center sponsors a wide range of classes, programs, and activities to promote healthy and independent living for individuals 50 years and older. No membership fee is required, although some classes and sessions have a small activity fee and/or registration fee.[26]

Clovis Health Care Facilities

Health care facilities within Clovis encompass Community Health Systems, Kaiser Permanente Clovis Medical Offices, residential care facilities, as well as private physicians and other medical practitioners.

Community Health System is a locally owned, not-for-profit, public-benefit organization based in Fresno, consisting of four acute-care hospitals (Community Regional Medical Center, Clovis Community Medical Center, Fresno Heart and Surgical Hospital, and Community Behavioral Health Center) and a cancer institute, along with several long-term care, outpatient and other healthcare facilities.[27] The Clovis Community Medical Center is located at 2755 Herndon Avenue, in Clovis and recently added 144 beds for a total of 352 all-private rooms.[28]

3.12.2 REGULATORY SETTING

FEDERAL

Fire Protection and Emergency Response Protection

INTERNATIONAL FIRE CODE

The International Fire Code (IFC) is a model code that establishes minimum requirements for fire prevention and fire protection systems using prescriptive and performance-related provisions, founded on broad-based principles that make possible the use of new materials and new designs. The IFC is used in a variety of ways in both the private and public sectors and are the basis of laws and regulations in communities across the U.S. and internationally. The IFC contains regulations to safeguard life and property from fires and explosion hazards. Topics include general precautions, emergency planning and preparedness, fire department access and water supplies, automatic sprinkler systems, fire alarm systems, special hazards, and the storage and use of hazardous

[26] City of Clovis, Senior Services, Senior Activity Center. Available at: https://cityofclovis.com/general-services/senior-services/. Accessed January 2024.

[27] Community Medical Centers, About Us. Available at: https://www.communitymedical.org/about-us. Accessed January 2024.

[28] Community Medical Centers, Locations, Clovis Community Medical Center. Available at: https://www.communitymedical.org/locations/clovis-community-medical-center. Accessed January 2024.

materials. The IFC also extends into non-regulatory settings to establish voluntary compliance programs, such as those promoting sustainability, energy efficiency and disaster resistance, best management practices, and other risk management activities.[29]

STATE

Police Protection

There are no federal or state regulations related to police protection services applicable to the proposed Project.

Fire Protection and Emergency Response

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with California Code of Regulations (CCR) Title 8 Section 1270 "Fire Prevention" and Section 6773 "Fire Protection and Fire Equipment" of the California Occupational Safety and Health Administration (Cal/OSHA) have established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.[30,31]

EMERGENCY RESPONSE/EVACUATION PLANS

The State passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. SEMS is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. The California Emergency Services Act 2021 Edition requires SEMS for managing multiagency and multijurisdictional responses to emergencies in California. State agencies are required to use SEMS and local government entities

[29] International Code Council, Inc., 2021 International Fire Code (IFC). Available at: https://codes.iccsafe.org/content/IFC2021P2. Accessed January 2024.

[30] [30] California Code of Regulations, Cal/OSHA – Title 8 Regulations, Division 1, Chapter 4, Subchapter 3, Article 10, Section 1270, Fire Prevention. Available at: https://www.dir.ca.gov/title8/1270.html. Accessed January 2024.

[31] California Code of Regulations, Cal/OSHA – Title 8 Regulations, Subchapter 15, Article 5, Section 6773, Fire Protection and Fire Fighting Equipment. Available at: https://www.dir.ca.gov/title8/6773.html. Accessed January 2024.

must use SEMS in order to be eligible for any reimbursement of response-related costs under the state's disaster assistance programs.[32]

CALIFORNIA FIRE CODE

The 2022 California Fire Code (CFC) contains regulations consistent with nationally recognized and accepted practices for safeguarding life and property from the hazards of fire and explosion; dangerous conditions arising from the storage, handling and use of hazardous materials and devices; and hazardous conditions in the use or occupancy of buildings or premises. The CFC also contains provisions to assist emergency response personnel, and fire safety-related building standards are referenced in other parts of CCR Title 24. The 2022 CFC is fully integrated into the 2021 IFC.[33]

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in the California Health and Safety Code, Division 12, Sections 13000 et seq. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.[34]

NATIONAL FIRE PROTECTION ASSOCIATION 1710 STANDARDS

The National Fire Protection Association (NFPA) 1710 Standards are applicable to urban areas and where staffing is comprised of career firefighters. NFPA 1710 Standards are applicable to all career fire departments and provides the minimum requirements for resource deployment for fire suppression, emergency medical services (EMS) and special operations, while also addressing fire fighter occupational health and safety. The following performance objectives are related to when an initial alarm is issued, and the time that personnel, equipment and resources are officially dispatched upon notification of a structure fire.[35]

---

[32] California Office of emergency Services, Standardized Emergency Management System. Available at: https://www.caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/planning-preparedness/standardized-emergency-management-system/. Accessed January 2024.

[33] International Code Council, Inc., 2022 Fire Code, Title 24, Part 9. Available at: https://codes.iccsafe.org/content/CAFC2022P1. Accessed January 2024.

[34] California Health and Safety Code, Division 12, Fires and Fire Protection, Sections 13000 et seq. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=12.&title=&part=&chapter=&article=&nodetreepath=20. Accessed January 2024.

[35] NFPA Standard 1710, Organization and Deployment of Fire Suppression Operations, EMS and Special Operations in Career Fire Departments. Available at: https://www.iaff.org/wp-content/uploads/Departments/Fire_EMS_Department/30541_Summary_Sheet_NFPA_1710_standard.pdf. Accessed January 2024.

- Alarm Answering Time: 95 percent within 15 seconds, or 99 percent within 40 seconds
- Alarm Processing Time: 90 percent within 64 seconds, or 95 percent within 106 seconds
- Turnout Time: 60 seconds for EMS and 80 seconds for fire
- First Engine Arrive on Scene Time: 240 seconds (four minutes)
- Initial Full Alarm (Low and Medium Hazard) Time: 480 seconds (eight minutes)
- Initial Full Alarm – High Hazard/ High-Rise Time: 610 seconds (ten minutes ten seconds)

Parks/Recreation

QUIMBY ACT

The Quimby Act (California Government Code Section 66477) states that "the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City collects impact fees at the time of building permits and final maps that include both capital impacts and land acquisition.[36]

Schools

CALIFORNIA GOVERNMENT CODE, TITLE 7, DIVISION 1, CHAPTER 4.9, SECTION 4.9

California Government Code, Title 7, Division 1, Chapter 4.9, Payment of Fees, Charges, Dedications, or Other Requirements Against a Development Project, Section 65995-65998 (h) is related to the payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 and, if applicable, any amounts specified in Section 65995.5 or 65995.7. It stipulates that payment of developer fees to schools are deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities.[37]

---

[36] California Government Code Section 66477, Quimby Act. Available at: https://casetext.com/statute/california-codes/california-government-code/title-7-planning-and-land-use/division-2-subdivisions/chapter-4-requirements/article-3-dedications/section-66477-payment-of-fees-for-park-and-recreational-purposes-as-condition-of-approval#:~:text=2023%20Legislative%20Session.-,Section%2066477%20%2D%20Payment%20of%20fees%20for%20park%20and%20recreational%20purposes,or%20recreational%20purposes%20as%20a. Accessed January 2024.

[37] California Government Code, Title 7, Division 1, Chapter 4.9, Section 65995, 2022. Available at: https://law.justia.com/codes/california/2022/code-gov/title-7/division-1/chapter-4-9/section-

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.[38]

Certain health and safety requirements for school site selection are governed by state regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

THE KINDERGARTEN-COMMUNITY COLLEGE PUBLIC EDUCATION FACILITIES BOND ACT OF 2016 (PROP 51)

The Kindergarten-Community College Public Education Facilities Bond Act of 2016 was the first education-related bond measure to appear on the ballot since 2006. This act was approved by California voters in November 2016 and provided for a bond issued of $9 billion with $7.0 billion earmarked for K-12 school facilities and $2 billion earmarked for community college facilities. The $7.0 billion for K-12 school facilities was allocated as follows: $3 billion for the construction of new school facilities, $500 million for providing school facilities for charter schools, $3 billion for the modernization of school facilities, and $500 million for providing facilities for career technical

65995/#:~:text=The%20amount%20of%20the%20square,county%20in%20calculating%20structural%20perimeters. Accessed January 2024.

[38] California Department of Education, School Site Selection and Approval Guide. Available at: https://www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp. Accessed January 2024.

education programs. The $2 billion allocated to community college facilities was for acquiring, constructing, renovating, and equipping community college facilities.[39]

LEROY F. GREENE SCHOOL FACILITIES ACT OF 1998 (SB 50)

The "Leroy F. Greene School Facilities Act of 1998," also known as Senate Bill 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district's authority to levy school impact fees. This comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as "Proposition 1A," reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for state construction and modernization funds.[40] It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- Level I fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.

- Level II fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30 percent of the district's bonding capacity (percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50 percent plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.

- Level III fees are outlined in Government Code Section 655995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of state funding.

---

[39] Legislative Analyst's Office, The California Legislature's Nonpartisan Fiscal and Policy Advisor. Available at: https://lao.ca.gov/ballot/2015/150023.pdf. Accessed January 2024.

[40] Senate Bill No. 50, Chapter 407. Available at: http://www.leginfo.ca.gov/pub/97-98/bill/sen/sb_0001-0050/sb_50_bill_19980827_chaptered.pdf. Accessed January 2024.

LOCAL

City of Clovis Municipal Code

Municipal Code Chapter 3.4, Park Acquisition and Development, establishes a method for coordinated acquisition and development of City park facilities. This Chapter states that any residential projects shall pay parks acquisition and development fees per dwelling unit.[41]

Title 4 of the City Municipal Code is dedicated to Public Safety. The purposes of Chapter 4.2, Emergency Services, are to provide for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency; the direction of the Emergency Organization; and the coordination of the emergency functions of the City with all other public agencies, corporations, organizations, and affected private persons. Chapters 4.3 and 4.4 pertain to Fire Department and Fire Prevention; Chapter 4.4 codifies the adoption of the California Fire Code. Chapter 4.10, Fire Facility Development Impact Fee, claims that any owner/developer who constructs or causes a dwelling unit or a "dwelling unit equivalent" to be constructed in the City shall pay a fire department fee in addition to any other fees required to be paid by the City. Chapter 4.11, Police Department Fee, mirrors Chapter 4.10 in that this Chapter requires the payment of a fee for a specific public service, in the case of Chapter 4.11, the fee goes towards police facilities.[42]

The purpose of Chapter 7.8, Library Facilities Development Impact Fees, is to create and establish a library facilities development impact fee ("library fee") for the City, which shall be used to mitigate adverse impacts to public library facilities and equipment attributed to new development. The library fee shall be used by the City to pay a portion of the costs of designated library facilities and equipment impacted by new development. The library fee shall be based on a method designed to ensure that developers pay their fair share of the cost of such library facilities and equipment required to serve the City's growing population.[43]

Section 9.22.060, Fire protection, is under Chapter 9.22, Performance Standards. Section 9.22.060 explains that all new or modified development shall be built per the currently adopted California Fire Code, related Municipal Code provisions, and current Clovis Fire Code standards and policies.[44]

---

[41] City of Clovis Municipal Code, Title 3, Section 3.4, Park Acquisition and Development. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis03/Clovis0304.html#3.4. Accessed January 2024.

[42] City of Clovis Municipal Code, Title 4, Public Safety. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis04/Clovis04.html. Accessed January 2024.

[43] City of Clovis Municipal Code, Title 4, Chapter 7.8, Library Facilities Development Impact Fee. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis07/Clovis0708.html#7.8. Accessed January 2024.

[44] City of Clovis Municipal Code, Title 9, Chapter 9.22, Section 9.22.060, Fire Protection. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis09/Clovis0922.html#9.22.060. Accessed January 2024.

Title 10 is dedicated to Parks and Recreation. This title regulates street trees and plants (Chapter 10.1); use of City parks and other City public facilities (Chapter 10.2); prohibited acts (Chapter 10.3); violations (Chapter 10.4); and skate park facilities (Chapter10.5).[45]

Clovis Parks Master Plan (2018)

The City of Clovis Parks Master Plan provides strategic guidance in the provision of parks services to best develop, promote, utilize, manage, and maintain a functional park system for the City of Clovis. The Parks Master Plan will guide policy development, prioritize demands and opportunities, and generate a strategic action plan for the next five to 10 years. The Parks Master Plan addresses current and aging areas of the City park system, as well as future growth of the City and identifies opportunities that will expand and complement the City Parks Division and address the needs of the community.[46]

City of Clovis General Plan

The General Plan includes several policies relevant to public services. It is noted that the currently adopted General Plan is the City of Clovis General Plan, adopted in August 2014; policies applicable to the Project are identified below:[47]

Land Use Element

- **Land Use Policy 6.1: Amendment criteria.** The City Council may approve amendments to the General Plan when the City Council is satisfied that the following conditions are met:

  A. The proposed change is and will be fiscally neutral or positive.

  B. The proposed change can be adequately served by public facilities and would not negatively impact service on existing development or the ability to service future development.

  C. The proposed change is consistent with the Urban Village Neighborhood Concept when within an Urban Center.

  D. General Plan amendments proposing a change from industrial, mixed-use business campus, or office (employment generating) land use designations to non-employment-generating land use designation shall be accompanied by an analysis of the potential impacts on the City's current and long-term jobs-housing ratio, as well as an evaluation on the change or loss in the types of jobs.

  E. This policy does not apply to:

---

[45] City of Clovis Municipal Code, Title 10. Parks and Recreation. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis10/Clovis10.html. Accessed January 2024.

[46] City of Clovis, Parks Master Plan, March 2018. Available at: https://cityofclovis.com/wp-content/uploads/2019/05/Clovis-Parks-Master-Plan-Final-3_19-18.pdf. Accessed January 2024.

[47] Clovis General Plan. August 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed January 2024.

i. County designations within the Clovis Planning Area or changes made by the City Council outside of the sphere boundary to reflect changes made by the County of Fresno.
ii. Changes initiated by public agencies (such as school districts, flood control) for use by public agencies.
iii. Changes initiated by the city within a specific plan.

Circulation Element

- **Circulation Policy 1.3: Age and mobility.** The design of roadways shall consider all potential users, including children, seniors, and persons with disabilities.
- **Circulation Policy 1.5: Neighborhood connectivity.** The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses).

Public Facilities and Services Element

- **Public Services and Facilities Policy 1.1: New development.** New development shall pay its fair share of public facility and infrastructure improvements.
- **Public Services and Facilities Policy 1.4: Development-funded facilities.** The City may require developments to install onsite or offsite facilities that are in excess of a development's fair share. However, the City shall establish a funding mechanism for future development to reimburse the original development for the amount in excess of the fair share costs.
- **Public Services and Facilities Policy 3.4: Joint use of facilities.** Partner with public and private educational institutions to jointly use facilities for both civic and educational purposes.
- **Public Services and Facilities Policy 4.3: Lifelong learning.** Enhance and expand Clovis' library facilities to meet the evolving educational and lifelong learning needs of the community. Coordinate with local educational institutions to offer courses and learning opportunities outside the classroom.
- **Public Services and Facilities Policy 4.4: Recreation programs.** Provide and/or sponsor recreational programs and services that are accessible and affordable to residents of all ages and abilities and encourage active and healthy living.
- **Public Services and Facilities Policy 4.5: Youth programs.** Coordinate with public and private schools, local nonprofits, service clubs, and other agencies to provide opportunities for youth to explore and enjoy sports, creative and performing arts, future career paths, civic activities, and volunteer opportunities.
- **Public Services and Facilities Policy 4.6: Senior programs.** Collaborate with service providers to provide a wide variety of senior services and programs, including daily opportunities for seniors to have physical activity, social interaction, and mental stimulation.

- **Public Services and Facilities Policy 4.7: Childcare and childhood development.** Encourage efforts to expand the overall capacity of and access to local childcare and early childhood development centers.
- **Public Services and Facilities Policy 4.8: Access to community facilities.** Improve transit connections to community facilities for people who are transit-dependent.
- **Public Services and Facilities Policy 5.9: Proximity to emergency medical services.** Require senior care facilities and other services providers that may need frequent emergency medical services to locate in proximity to fire stations and medical service providers.
- **Public Services and Facilities Policy 6.1: Fire and Police Service.** Maintain staffing, facilities, and training activities to effectively respond to emergency and general public service calls.
- **Public Services and Facilities Policy 6.2: Resource allocation.** Periodically conduct service level studies to analyze crime and emergency service performance data, to evaluate the effectiveness of prevention and reduction strategies, and to allocate resources accordingly.
- **Public Services and Facilities Policy 6.3: Emergency medical calls.** Explore options to lessen the demand on fire and police services or expand reimbursement programs to ensure the service pays for measured impacts.
- **Public Services and Facilities Policy 6.4: Skilled medical facilities.** Consider options to offset or apportion the higher cost of providing emergency medical service to facilities with existing skilled medical personnel on staff.
- **Public Services and Facilities Policy 6.5: Public safety hot spots.** Prioritize improvement and enforcement activities to minimize existing and prevent future public safety hot spots. Reevaluate siting and development standards for facilities that generate high demands for service calls.
- **Public Services and Facilities Policy 6.6: Interagency support.** Participate in mutual aid system and automatic aid agreements to back up and supplement capabilities to respond to emergencies.
- **Public Services and Facilities Policy 6.7: Interagency communications.** Maintain an effective communication system between emergency service providers within Clovis and neighboring jurisdictions.
- **Public Services and Facilities Policy 6.8: Emergency preparedness planning.** Maintain an emergency operations plan, an emergency operations center, and a hazard mitigation plan to prepare for actual or threatened conditions of disaster or extreme peril.
- **Public Services and Facilities Policy 6.9: Community outreach.** Conduct outreach in the community to promote personal and public safety in daily life and in cases of emergency. Regularly update and inform the public on the real levels of crime and safety to strengthen their perceived sense of personal security.

Environmental Safety Element

- **Environmental Safety Policy 1.5: Critical and public facilities.** Locate and design critical and public facilities to minimize their exposure and susceptibility to flooding, seismic and geological effects, fire, and explosions. Ensure critical use facilities (e.g., hospital, police, and fire facilities) can remain operational during an emergency.
- **Environmental Safety Policy 1.6: Public information and emergency preparedness.** Provide the public with accurate and reliable information regarding natural hazards to prevent and mitigate potential risks and exposure for life and property. Continue to maintain a local hazard mitigation plan and conduct programs to inform the general public of the City's emergency preparedness and disaster response procedures.

Open Space and Conservation Element

- **Open Space and Conservation Policy 1.1: Parkland standard.** Provide a minimum of 4 acres of public parkland for every 1,000 residents.
- **Open Space and Conservation Policy 1.2: Existing parks.** Upgrade and rehabilitate existing parks as necessary to meet the needs of the community and as the financial resources of the city allow.
- **Open Space and Conservation Policy 1.3: New parks and recreation facilities.** Provide a variety of parks and recreation facilities in underserved and growing areas of the community.
- **Open Space and Conservation Policy 1.4: Joint use of education facilities.** Provide a balanced system of parks and recreation facilities through joint use of facilities owned by school districts.
- **Open Space and Conservation Policy 1.5: Multipurpose open space.** Design public facilities as multipurpose open space and recreation to serve the community's infrastructure needs while preserving and enhancing open space and water features. Prioritize the use of existing basins for existing areas, and for future areas prioritize the development of separate park facilities available year-round.
- **Open Space and Conservation Policy 1.7: Sustainability.** Develop new and maintain existing parks and recreation facilities to achieve fiscal and environmental sustainability.
- **Open Space and Conservation Policy 1.8: Funding.** Require new development to provide pocket and neighborhood parks, dedicate land for area parks, and pay impact fees for community and regional parks. Require new development to establish lighting and landscape maintenance districts to fund operations and maintenance.
- **Open Space and Conservation Policy 1.9: Master plan.** Periodically update the Parks Master Plan to direct the implementation of the city's open space facilities.

3.12.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on public services if it would 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 for any of the public services:
    - Fire Protection;
    - Police Protection;
    - Schools;
    - Parks; and
    - Other public facilities.
- An increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- If it includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

IMPACTS AND MITIGATION MEASURES

Impact 3.12-1: The proposed Project has the potential to require the construction of police department facilities which may cause substantial adverse physical environmental impacts. (Less than Significant)

The proposed Project would introduce new commercial and residential uses to the City, as it includes the addition of up to 3,286 residential units and could result in an increase of approximately 9,333 persons. This will create an increased demand for police protection services compared to existing conditions. Most of the Project site is located within Clovis General Plan Focus Area 13. The proposed Urban Center requires a master plan community overlay district or specific plan to implement development in Focus Area 13. The proposed Project includes a general plan amendment to establish Focus Area 13a for the Master Plan.

To the extent that the Project would have an incremental increase in demand on police protection services provided by the CPD, the Project would be required to pay the police facility fee in accordance with Clovis Municipal Code Chapter 4.11, Police Department Fees. The fee is imposed on residential development within the City for the purposes of assuring that the current level of service goals of the City are met with respect to additional demands placed on police facilities from such development.

According to the most recent Department of Finance (2023) estimates, the population of Clovis is 124,523 and the average number of persons residing in a dwelling unit is 2.84; therefore, the

Project is estimated to increase the population by 9,333 residents. [48,49] As of 2022, the CPD has 109 sworn officers. With the addition of 9,333 residents, which equates to a staffing level of approximately 0.81 officers per 1,000 residents. This is not a significant change from the current service ratio of 0.82 officers per 1,000 residents. The City has anticipated additional officers would be hired as the City population grows. The City and CPD periodically monitor response times and reports annually on the results to ensure adequate police protection service levels are provided.

Impact fees from new development are collected based upon projected impacts from each development and are reviewed periodically to ensure that the fee is commensurate with the services provided. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with police services.

The Project does not propose and would not create a need for new or physically altered police protection facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, the Project would not result in adverse physical impacts associated with such police service facilities. The Project would be required to pay the City's development fee specific to police, which in accordance with the Clovis Municipal Code, shall be used solely and exclusively for the purpose of funding police station improvements. Payment of the fee would offset the incremental increase in demand for police protection services associated with the Project. In addition, the Development Area would be required to annex into the City of Clovis Public Safety Community Facilities District.

Based on the ability of the CPD to serve the City, it is anticipated that the existing police department facilities are sufficient to serve the proposed Project, and the construction of new or expanded police facilities would not be required. Therefore, impacts would be **less than significant**.

Impact 3.12-2: The proposed Project has the potential to require the construction of fire department facilities which may cause substantial adverse physical environmental impacts. (Less than Significant)

The proposed Project would introduce new commercial and residential uses to the City, creating an increase demand for fire services, as compared to existing conditions. As of 2022, CFD did not

[48] California Department of Finance, E-4 Population Estimates for Cities, Counties, and the State, 2001-2010, with 2000 & 2010 Census Counts. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e4-2000-2010/. Accessed January 2024.

[49] California Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2021-2023 with 2020 Censes Benchmark. Available at: https://dof.ca.gov/forecasting/demographics/estimates/e-4-population-estimates-for-cities-counties-and-the-state-2021-2023-with-2020-census-benchmark/. Accessed January 2024.

meet or exceed its 90th percentile response-time goals, as shown in CFD's average response times in Table 3.12-3. While the CFD has not met response time goals as of 2022, CFD's Station 6, opened in 2022, will allow the CFD to respond more quickly and serve more people within their jurisdiction. Fire Station 5 is located approximately one mile south of the Project at the southwest corner of Temperance and Alluvial Avenues.

Although a General Plan Amendment would be required as part of the proposed Project, to the extent that the Project would have an incremental increase in demand on fire services provided by the CFD, the Project would be required to pay the community facility fee in accordance with Clovis Municipal Code Chapter 4.10, Fire Facility Development Impact Fee. The fee is imposed on residential development within the City to ensure that service levels are met with respect to the additional demands placed on fire and emergency services resulting from implementation of development projects.

As described above, according to the most recent Department of Finance (2023) estimates, the population of Clovis is 124,523 and the average number of persons residing in a dwelling unit is 2.84; therefore, the Project is estimated to increase the population by 9,333 residents. As of 2023, the CFD has 70 sworn professional firefighters, fire engineers, fire officers, chief officers, fire inspectors, and administrative staff. With the addition of 9,333 residents, which equates to a staffing level of approximately 0.52 fire fighters/emergency responders per 1,000 residents. This is not a significant change from the current service ratio of 0.56 fire fighters/emergency responders per 1,000 residents. The City has anticipated additional fire fighters and emergency responders would be hired as the City population grows.

As such, implementation of the proposed Project would not create a need for new or physically altered fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives. Development fees from new development are collected based upon projected impacts from each development. The adequacy of impact fees is reviewed periodically to ensure that the fee is commensurate with the service. In addition, the Project Site would be required to annex into the City of Clovis Public Safety Community Facilities District. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would be generated by property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with fire protection and emergency services. Therefore, implementation of the proposed Project would not require the construction of additional fire department facilities, and the impact of the proposed Project on the need for additional fire services facilities would be **less than significant**.

Impact 3.12-3: The proposed Project has the potential to require the construction of school facilities which may cause substantial adverse physical environmental impacts. (Less than Significant)

The proposed Project is located within the service boundaries of the CUSD. Currently, addresses located within the existing Project site are assigned to Riverview Elementary School

(approximately 3.5 miles west of the Project site), Granite Ridge Intermediate School (approximately 3.3 miles west of the Project site), and Clovis North High School (approximately 3.4 miles west of the Project site).[50]

Based on a maximum of 3,286 proposed new residential units, the proposed Project would result in population growth by generating up to 9,333 new residents, including school-aged children that would attend the schools that serve the Project site and surrounding area. Utilizing the student generation rates provided by the CUSD in the School Facilities Needs Analysis, and the most conservative student generation rate based on single family units, the proposed Project would be expected to generate approximately 1,811 new students, broken down by grades as follows: [51,52]

- TK–6: 1,092 students
- 7-8: 252 students
- 9-12: 467 students

Students generated as a result of Project implementation, would most likely attend Riverview Elementary School, Granite Ridge Intermediate School, and Clovis North High School, as these are the schools currently assigned to the addresses at the proposed Project site; however, student placement is subject to CUSD's determination.

CUSD's facility capacity was estimated at 22,766 for grades TK-6, 6,561 for grades 7-8, and 12,135 for grades 9-12. CUSD currently does not have sufficient capacity at the elementary and high school levels to accommodate projected students from new development. Therefore, the CUSD will need additional school facilities during the next five years for approximately 263 students in grades TK-6 and 581 students in grades 9-12.[53] CUSD currently owns four elementary school sites (Fowler-McKinley, Minnewawa-Perrin, Minnewawa-International, and an elementary site in the Millerton Specific Plan Area), as well as the Bradley Educational Center site, which would accommodate a future high school, intermediate school, and elementary school. The proposed Project includes development of a new approximately 19.35-acre CUSD elementary school to serve the new community, and a site for the school has been planned but not yet confirmed. Therefore,

[50] Clovis Unified School District, Clovis Boundary Map. Available at: https://maps.cusd.com/address/. Accessed February 2024.

[51] Odell Planning and Research, Inc., School Facilities Needs Analysis, prepared for Clovis Unified School District, April 2023. Table 4. Available at: https://www.cusd.com/DeveloperFees.aspx. Accessed January 2024.

[52] Calculations based on the CUSD School Facilities Needs Analysis (2023), which states that single family residential development generates an average of 0.3324 students grades TK-6; 0.0766 students for grades 7-8; and 0.1421 students for grades 9-12 per unit.

[53] Odell Planning and Research, Inc., School Facilities Needs Analysis, prepared for Clovis Unified School District, April 2023. Table 6. Available at: https://www.cusd.com/DeveloperFees.aspx. Accessed January 2024.

CUSD has school site capacity for all projected students in all grade levels, and no new site acquisition is needed.

School districts are authorized to collect fees on new residential and commercial/industrial development in accordance with Education Code Section 17620 and Government Code Section 65995. CUSD's School Facilities Needs Analysis provides justification necessary to demonstrate that the CUSD is justified in collecting Level II fees on new residential and commercial/industrial development of $5.68 and $0.78 per square foot, respectively.[54] The development fees collected by the CUSD may be used for construction and reconstruction of school facilities, site development, relocatable classrooms on existing or future sites and other facilities necessitated by students generated by new development.

Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund improvements associated with school services. Furthermore, according to Government Code Section 65996, the development fees authorized by SB 50 (1998) are deemed to be "full and complete school facilities mitigation" for any demands or impacts on school facilities caused by new development, Therefore, the impact of the proposed Project on the need for additional school facilities would be **less than significant**.

Impact 3.12-4: The proposed Project has the potential to have effects on other public facilities. (Less than Significant)

The proposed Project will bring residents to the area which may require the use of other public services such as libraries, civic centers, etc. Public services such as the Clovis Branch of the Fresno County Public Library and the Clovis Senior Center would continue to serve future Project residents. The City collects impact fees from new development based upon projected impacts from each development, including impacts on other public services as required by Chapter 3.10, Development Impact Fees and Chapter 7.8, Library Facilities Development Impact Fees of the City's Municipal Code. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with these other public services.

The proposed Project does not trigger the need for new facilities associated with other public services. Consequently, new facilities for other public services are not proposed at this time. The proposed Project would not result in the need for new facilities for other public services, and impacts would be **less than significant** relative to this topic.

[54] Clovis Unified School District. Developer Fees. Available at: https://www.cusd.com/DeveloperFees.aspx. Accessed January 2024.

Impact 3.12-5: The proposed Project has the potential to require the construction of park and recreational facilities which may cause substantial adverse physical environmental impacts. (Less than Significant)

Implementation of the proposed Project would result in an increase in the area's population, as a result of new residential and commercial development. As discussed previously, the Project proposes up to 3,286 new residential units, which would result in an increased residential population of approximately 9,333 persons. The City's General Plan identifies a park standard based on a goal of four acres of public parkland per 1,000 residents within the City limits. The Project proposes to include approximately 38 acres of parks, trails and school facilities.

As discussed above, the City currently does not meet the park acreage standards for any park category. The acreage of regional parks surpass the City's goal of four acres per 1,000 residents, but no regional parks are within the City of Clovis. The City's Parks Master Plan identifies additional facility needs required over the next five to 10 years. The goal for future planning increases the park area to approximately 380 acres and also substantially increases the number of trails. This amount is approximate and could be met by a combination of utilizing existing undeveloped parkland and acquiring new parkland to develop. [55]

Although the Project's proposed new open space opportunities would bring the City closer to its goal of parkland for its future residents, it would not provide enough parkland needed to meet the four acres per 1,000 people standard. However, Municipal Code Chapter 3.4, Park Acquisition and Development, states that any developer who plans for dwelling units to be constructed in the City shall pay, in addition to any other fees required to be paid by the City, a fee which shall be calculated on the basis of park acreage designated in the Clovis General Plan consisting of the estimated total land acquisition and construction cost distributed on the basis of the remaining developable area within the sphere of influence. In accordance with the Municipal Code, fees are deposited in specific funds that shall be used solely for the acquisition, improvement and expansion of public parks and recreation facilities as outlined in the park acquisition and improvement fee update. Upon provision and dedication of the proposed parkland and/or payment of required fees in accordance with the Clovis Municipal Code Chapter 3.04, and other Municipal Code policies, the proposed Project would result in **less than significant** impacts related to impacts to the need for parks and recreational facilities.

Impact 3.12-6: The proposed Project has the potential to increase the use of existing neighborhood and regional parks or other recreational

[55] City of Clovis, Parks Master Plan, March 2018. Available at: https://cityofclovis.com/wp-content/uploads/2019/05/Clovis-Parks-Master-Plan-Final-3_19-18.pdf. Accessed January 2024.

facilities, such that substantial physical deterioration of the facility would occur or be accelerated. (Less than Significant)

As discussed above, the proposed Project will directly increase the number of persons by adding up to 3,286 residential units, resulting in approximately 9,333 new residents. The Project proposes to include open space totaling approximately 59 acres of parks, trails and preserved open space, and will pay park impact fees according to Municipal Code Chapters 3.04 and 3.10. It is not anticipated that the proposed Project would result in a significant increase in the use of existing neighborhood and regional parks or other recreational facilities, such that substantial deterioration would occur, because the Project includes new recreational facilities for residents within the Project site and provides funding to existing park facilities through required fees. Therefore, it is not anticipated that any substantial physical deterioration of existing facilities would occur or be accelerated. As such, the proposed Project would have a **less than significant** impact relative to this topic.

This page left intentionally blank.

This section of the EIR analyzes the potential impacts of the proposed Project on the surrounding transportation system including roadways, bicycle/pedestrian facilities, and transit facilities/services. This section identifies the significant impacts of the proposed Project. An evaluation of vehicular access to the proposed Project is also provided. All technical calculations are in the CEQA Transportation Evaluation memorandum, prepared by Kittelson & Associates, June 27, 2024, for the proposed Project (provided in Appendix I of this EIR).

Comments were received during the public review period or scoping meetings for the Notice of Preparation regarding this topic. Each of the comments related to this topic are addressed within this section. Full comments received are included in Appendix A.

3.13.1 INTRODUCTION

The California Environmental Quality Act (CEQA) transportation analysis for the Vista Ranch Project (Project) in Clovis, CA, evaluates the transportation impact areas that may be considered in environmental documentation for the project. A separate Local Transportation Analysis (LTA) evaluates other transportation issues such as roadway and intersection capacity which are not part of the environmental evaluation under CEQA.

The CEQA checklist for transportation includes four questions that this memo will evaluate. These four questions include:

a. Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (vehicle miles of traveled (VMT) assessment)
c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
d. Would the project result in inadequate emergency access?

The following sections include a brief description of the Project, existing transportation conditions in the Project area, regulations and policies which apply to the CEQA evaluation, and an assessment of each of the four CEQA transportation questions.

PROJECT DESCRIPTION

The Project includes approximately 952 acres located within the city's planning area and is bounded on the north by Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by Shepherd and Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues. The project contains both a master plan area and a non-development sphere of influence expansion. Figure 3.13-1 shows the Project and study area.

The Master Plan area is approximately 507 acres and proposes the construction of up to 3,286 residential units, approximately 16 acres of commercial/mixed uses, approximately 19 acres for an elementary school, approximately 32 acres for mini-storage and approximately 59 acres of parks,

trails, and preserved open space. The non-development area is approximately 445 acres and will not receive any entitlements other than to be included in the Sphere of Influence (SOI) expansion.

The Project's planning area is separated into three distinct areas which include:

- MPArea 1, approximately 368 acres including:
  - Up to 1,268 medium density residential dwelling units (Zoned R-1-MD)
  - Up to 1,039 medium high density residential dwelling units (Zoned R-2)
  - Up to 500 very high density residential dwelling units (Zoned R-4)
  - Up to 85,000 square feet of gateway commercial (Zoned C-1)
  - An accessible public park of 2.74 acres
- MPArea 2, approximately 139 acres including:
  - Up to 137 low density residential dwelling units (Zoned R-1)
  - Up to 224 medium density residential dwelling units (Zoned R-1-MD)
  - Up to 115,000 square feet of gateway commercial (Zoned C-1)
  - Mini self-storage facility with up to 421,356 square feet of building (Zoned M-1)
  - Elementary school with up to 750 students or an additional 118 medium density residential units (Zoned R-1-MD)
- Non-Development Area, approximately 445 acres that have not requested any entitlements at this time other than to be included in the proposed SOI expansion.

3.13.2 EXISTING CONDITIONS

This section provides a description of the existing roadway, transit, bicycle, and pedestrian components of the transportation system within the Project study area.

Roadway Network

The existing roadway network in the Project study area is composed of freeways, super arterials, arterials, and collector roads. Roadway classifications listed are from Fresno County to account for roadways currently outside the city of Clovis.

FREEWAYS

State Route 168 (SR 168) is a divided four-lane highway running northeast to southwest through the study area. It provides connection from the intercity Fresno area to the Sierra Nevada Mountain range. Access points to SR 168 are located at Herndon Avenue, Fowler Avenue, Temperance Avenue, Owens Mountain Parkway and Shepherd Avenue. Most sections in the study area have limited access but sections near Owens Mountain Parkway and Shepherd Avenue have at-grade intersections. The speed limit is generally set at 65 miles per hour (mph) within the study area.

EXPRESSWAY

Shepherd Avenue is an east to west running roadway that ranges from a two lane road to a four lane divided by a median roadway near the Project where it provides the southern boundary for the Project. Newer sections of the road are the four lane divided sections while the older unimproved

sections are the two lane areas. Sidewalks are along the developed south side of the roadway, and conventional bike lanes on each side. Shepherd Avenue connects SR 168 to Willow Avenue at the western edge of the study area. A half mile segment of Shepherd Avenue between Fowler Avenue and Sunnyside Avenue is not improved and classified as an arterial. The speed limit ranges from 50 mph on the divided sections to 40 mph in the two-lane highway section.

SUPER ARTERIALS

Willow Avenue runs north to south along the western edge of the study area from Behymer Avenue to Herdon Avenue. Willow Avenue has six lanes divided by a center median. From Shepherd Avenue south, the majority of Willow Avenue has bike lanes and sidewalks on both sides. The Clovis Old Town Trail runs along the Willow Avenue right-of-way (ROW) from Behymer Avenue to just south of Teague Avenue where it crosses under Willow Avenue heading southeast. Willow Avenue provides access to central Clovis to the south and the Clovis Community College campus to the north. The speed limit in the vicinity of the Project (near Shepherd) is 50 mph.

ARTERIALS

North-South

Clovis Avenue is located west of the Master Plan Area, beginning north of Shepherd Avenue, and connecting south to Herndon Avenue. Clovis Avenue is four lanes with a center median with sidewalk and bike lanes on each side. Between Teague Avenue and Alluvial Avenue, the Dry Creek Trail shared use path shares the ROW along the east side of the corridor. The speed limit is approximately 45 mph.

Fowler Avenue runs through the study area classified as a local street, changing to an arterial from Shepherd Avenue south to SR 168. The roadway configuration on Fowler Avenue is mixed due to fronting land uses and undeveloped parcels.

- From Shepherd Avenue to Teague Avenue there are two lanes in the southbound direction and one lane northbound. A bike lane and sidewalk are located along the majority of this section. The Enterprise shared use path crosses Fowler Avenue south of Shepherd Avenue and connects with a shared use path on the west side of Fowler Avenue from the Enterprise trail crossing to Teague Avenue. The speed limit in this section is 45 mph.
- From Teague Avenue to Nees Avenue the ROW narrows and includes one lane in each direction with no sidewalk and bike facilities. The speed limit remains 45 mph.
- From Nees Avenue to SR 168, the cross-section includes four lanes with a center median, and includes bike lanes and sidewalks on each side. The speed limit in this section is 45 mph.

Temperance Avenue begins in the center of the Master Plan Area and runs south to SR 168 and a collection of commercial land uses. The roadway is a four-lane divided road with bike lanes and sidewalks on each side. The speed limit is 50 mph.

De Wolf Avenue runs from Shepherd Avenue south to Owens Mountain Parkway on the eastern edge of the Master Plan Area. The roadway cross section generally has a single lane in each direction with a center median allowing for turn lanes. Bicycle lanes and sidewalks are provided on each side.

De Wolf Avenue provides access from the Master Plan Area to the SR 168 freeway via Owens Mountain Parkway. The posted speed limit is 40 mph.

East-West

Shepherd Avenue has a small section from Fowler Avenue to Sunnyside Avenue that is classified as an arterial rather than an expressway. The roadway narrows to two lanes without a median and no bike or walking facilities. Future development in this area will improve this segment of Shepherd Avenue to be consistent with the rest of the roadway. The speed limit in this section is 40 mph.

Owens Mountain Parkway connects to SR 168 and terminates prior to Nees Avenue without providing a connection under existing conditions. Future plans would extend this roadway to connect to Temperance Avenue at Alluvial Avenue. Owens Mountain Parkway is one lane in each direction with a center median and bike lanes on each side. Sidewalks are intermittent where existing development is located on the western section. The roadway pairs with De Wolf Avenue to provide access from the Master Plan Area to SR 168. There are currently no observed posted speed limit signs.

Nees Avenue runs through the center of the study area, cutting through suburban neighborhoods where the land use shifts east of Clovis Avenue to a more rural and undeveloped landscape. From Willow Avenue to Minnewawa Avenue the corridor has four lanes with a center turn lane and sidewalk on the majority of both sides. East of Minnewawa Avenue, the corridor is varied with some two-lane undivided sections, divided two lane sections, and divided three lane sections. Posted speed limits range from 40 mph to 45 mph.

Herndon Avenue is at the southern edge of the study area and connects SR 168 and the northern parts of Fresno to the west. Herndon Avenue is six lanes with a center turn lane. The corridor has sporadic sidewalks adjacent to areas of newer development. The posted speed limit is 45 mph.

COLLECTORS

The collector streets vary greatly in their configuration and character, as many traverse through developed neighborhoods and undeveloped land. Collector roadways within the study area are listed in Table 3.13-1**.** Each street condition is listed as one of the following:

- **Improved –** The majority of the street cross section has been brought up to current stands and includes sidewalk and bicycle facilities based on context.
- **Unimproved –** The majority of the street cross section has not been brought to current standards and may not include curbs, sidewalk, or bicycle facilities.
- **Mixed –** The street cross section is mixed between improved and unimproved condition, based primarily on frontage of a developed neighborhood or commercial tract.

TABLE 3.13-1: COLLECTOR STREETS

	STREET NAME	*CONDITION*
North/South	Sunnyside Avenue	Mixed
	Locan Avenue	Mixed
	Peach Avenue	Improved
	Armstrong Avenue	Mixed
	Leonard Avenue	Improved
	Minnewawa Avenue	Improved
East/West	Teague Avenue	Mixed
	Powers Avenue / Dutch Avenue	Improved
	Harlan Ranch Avenue	Improved
	Highland Avenue	Improved
	Tollhouse Rd.	Unimproved
	Alluvial Avenue	Mixed

LOCAL STREETS

Within the study area, there are many local streets providing access to residential single-family housing. Many of the local streets within neighborhood developments do have sidewalks on both sides of the street, however streets in less dense residential or undeveloped areas do not.

Master Plan Area

Within the Master Plan Area, which is currently outside of the City of Clovis, there are several local streets serving residents. The major local streets within the Master Plan Area are described below.

Behymer Avenue connects the north edge of the Master Plan Area west to Willow Avenue. It has two lanes and no sidewalk or bike facilities. Behymer Avenue is in a rural residential context and is posted at 45 mph.

Fowler Avenue changes character significantly north of Shepherd Avenue. It runs through the center of the Master Plan Area and provides rural residential access. Fowler Avenue is two lanes without sidewalk or bike facilities and is posted at 45 mph. It connects the city of Clovis to the south with Behymer Avenue to the north.

Perrin Avenue is a short east to west connecting street providing rural residential access. It is two lanes, without a center stripe, and does not have sidewalk or bike facilities. It is also split into two sections, divided by parcels in the center. It connects to Sunnyside Avenue and Fowler Avenue. There are no posted speed limit signs.

Sunnyside Avenue north of Shepherd Avenue maintains a rural residential context, but does not have a center stripe, nor does it have sidewalk or bike facilities. It connects north to Perrin Avenue. There are no posted speed limit signs but there is an "end 45 speed limit" sign indicating the speed limit is 55 mph per its roadway classification.

Burgan Avenue connects Perrin Avenue south to Shepherd Avenue. It provides rural residential access, with two lanes, no center stripe and does not have sidewalk or bike facilities. No speed limit is posted.

Transit

The following section describes existing transit services near the study area. These routes are shown graphically in Figure 3.13-2. Detailed information on served areas and hours of operation are found in Table 3.13-2.

Fresno Area Express (FAX)

FAX provides fixed route transit services serving the city of Fresno and a portion of the City of Clovis and is the largest transit service provider in the region with almost seven million annual boardings. Handy Ride is the paratransit service provider for the FAX system.

Route 3 serves the western edge of the study area along Willow Avenue terminating at Clovis Community College. Service runs every 30 minutes each day of the week.

Clovis Transit

Clovis Transit is the principal transit service in the city of Clovis and provides fixed route and paratransit services. Clovis Transit connects with Fresno Area Express (FAX). Round Up is the paratransit service for the Clovis Transit system.

Route 10 is a circulator route that provides service to the western portion of Clovis and connects to the Clovis Civic Center.

Route 50 is a circulator route serving the northeast and southeast section of Clovis.

Route 80 provides local services from central Clovis to the Buchanan education complex.

Fresno County Rural Transit Agency (FCRTA)

FCRTA provides general public transit service to rural communities throughout Fresno County. FCRTA provides both scheduled, fixed route services with designated bus stops along specific routes, as well as reservation-based, demand responsive service that offers curb-to-curb transportation.

Auberry Route

The Auberry transit route provides connection from Clovis to the Auberry area foothill communities northeast of Clovis. The service is demand responsive and operates one day per week with 24-hr advanced notice.

TABLE 3.13-2: BUS ROUTES SERVING THE STUDY AREA

	ROUTE	SERVING	DAY	TIMES		FREQUENCY
Existing	**Fresno Area Express**					
	3	Route 3 connects Clovis Community College to Herdon. The route provides access to several shopping centers and medical facilities along the route.	Mon – Fri	5:45am	8:45am	30min
			Sat – Sun	6:45am	6:15pm	30min
	Clovis Transit					
	10	Route 10 connects north Clovis to Fresno State University, serving Clovis Civic Center, and Peachwood Medical Center.	Mon – Fri	6:15am	6:30pm	30min
			Sat	7:30am	3:30pm	30min
	50	Route 50 connects medial facilities near Herdon Avenue to Clovis Civic Center, and south to several schools and shopping centers.	Mon – Fri	6:05am	5:35pm	30min
			Sat	7:35am	2:05pm	60min
	80	Route 80 serves the Buchanan Education complex and connects to Clovis Civic Center, passing several parks and shopping centers including Bicentennial Park and Walmart, respectively.	Mon – Fri	6:15am	6:30pm	30min
			Sat	7:30am	3:30pm	30min
	Fresno County Rural Transit Agency					
	Auberry	The Auberry transit route provides connection between the foothill communities in Northeast Fresno County and the intercity area of Clovis and Fresno.	Tues	8am	5pm	On demand

Source: www.fresno.gov/fax, www.ruraltransit.org/route-services, https://clovistransit.com, accessed Jan 26, 2024

Bicycle and Pedestrian Facilities

Bicycle and pedestrian facilities are important components of the transportation network in the study area. They not only offer non-vehicular opportunities for both commute and recreational trips but also provide connections to the Clovis transit network and opportunities to shop, dine, and accomplish other daily needs without using a car.

EXISTING BICYCLE FACILITIES

Bicycle facilities are defined by the following four classes:[1]

- Class I – Provides a completely separated facility designed for the exclusive use of bicyclists and pedestrians with crossing points minimized.

[1] As detailed in Chapter 1000 of the Highway Design Manual (Caltrans, 2020).

- Class II – Provides a restricted right-of-way designated lane for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.
- Class III – Provides a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists.
- Class IV – Provides a restricted right-of-way designated lane for the exclusive use of bicyclists that is separated by a vertical element to provide further separation from motor vehicle traffic.

In Fall 2023, the City of Clovis adopted their Active Transportation Plan (ATP), which provides a clear vision for the active transportation network and provides strategies to implement the planned network. The following bikeways are currently present within the study area, but many are at intermittent locations on the listed roads. They are shown graphically in Figure 3.13-3.

Class I Bike Paths

- Dry Creek Trail (Clovis Avenue)
- Enterprise Trail
- Multiple Neighborhood trails on east end of Study Area

Class II Bike Lanes

- Shepherd Avenue
- Teague Avenue
- Alluvial Avenue
- Herndon Avenue
- Willow Avenue
- Peach Avenue
- Clovis Avenue
- Sunnyside Avenue
- Fowler Avenue
- Temperance Avenue
- Locan Avenue
- De Wolf Avenue

PLANNED AND PROPOSED BICYCLE FACILITIES

The Clovis ATP includes proposed bike facilities in the study area. They are listed below and shown in Figure 3.13-3. The planned alignments aim to fill gaps in the existing network and enhance safety and comfort for people biking.

Class I Bike Paths

- Various connections that fill gaps in the existing Class I network are proposed.

Class II Bike Lanes

Conventional Bike Lane (No Buffer)

- Behymer Avenue
- Teague Avenue
- Nees Avenue
- Alluvial Avenue
- Clovis Avenue
- Marion Avenue
- Sunnyside Avenue
- Fowler Avenue
- Armstrong Avenue
- Locan Avenue
- Owens Mountain Pkwy.
- Harlan Ranch Blvd.

Buffered Bike Lane

- Shepherd Avenue
- Nees Avenue
- Herndon Avenue
- Willow Avenue
- Minnewawa Avenue
- Fowler Avenue
- Temperance Avenue
- De Wolf Avenue

Class III Bike Routes

- Nees Avenue
- Powers/Dutch Avenue
- Leonard Avenue

Pedestrian Facilities

The Clovis ATP assesses and recommends pedestrian facility enhancements as well as bicycle facilities. Pedestrian facilities are present throughout the study area, however there are sidewalk gaps present intermittently along some roadways. Longer gaps on collector and arterial roadways include:

- Shepherd Avenue between Willow Avenue and Sunnyside Avenue
- Nees Avenue between Armstrong and Locan Avenue
- Alluvial Avenue between Fowler Avenue and Armstrong Avenue

Existing sidewalk and sidewalk gaps are shown below in Figure 3.13-4. The Clovis ATP provides a prioritized list of sidewalk infill segments. Those within the Study Area are listed below:

- Nees Avenue from Whittier Avenue to Armstrong Avenue (0.25 mile)
- Alluvial Avenue from Fordham Avenue to West of Renn Avenue (0.14 mile)

3.13.3 REGULATORY SETTING

This section summarizes applicable federal, state, regional, and local plans, laws, and regulations that are relevant to this analysis. This information provides a context for the discussion related to the Project's consistency with applicable policies, plans, laws, and regulations.

FEDERAL

No federal plans, policies, regulations, or laws pertaining to transportation have been determined to be applicable to this Project.

STATE

Senate Bill 743

Senate Bill 743 (SB 743) was signed into law in September 2013. SB 743 (Steinberg, 2013) required changes to the CEQA Guidelines regarding the analysis of transportation impacts. Historically, CEQA transportation analyses of individual projects determined impacts in the circulation system in terms of roadway delay and/or capacity at specific locations. SB 743 changes include the elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. Those proposed changes identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project's transportation impacts. Since the bill has gone into effect, automobile delay, as measured by "level of service" and other similar metrics, no longer constitutes a significant environmental effect under CEQA. Auto-mobility (often expressed as "LOS") may continue to be a measure for planning purposes.[2]

In December 2018, the California Governor's Office of Planning and Research (OPR) and the State Natural Resources Agency submitted updated CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law approved the updated CEQA Guidelines, thus implementing SB 743 and making VMT the primary metric used to analyze transportation impacts. The final text, final statement of reasons, and related materials are posted at http://resources.ca.gov/ceqa. The changes have been approved by the Office of Administrative Law and are now in effect. For land use and transportation projects, SB 743-compliant CEQA analysis became mandatory on July 1, 2020.

REGIONAL

Fresno Council of Governments Regional Transportation Plan

The Fresno COG is a voluntary association of local governments and a regional planning agency comprised of 16 member jurisdictions, including the city of Clovis. The members are represented by a Policy Board consisting of mayors of each incorporated city, and the Chairperson of the County Board of Supervisors, or their designated elected official. The Fresno COG's purpose is to establish a consensus on the needs of the Fresno County area and further action plans for issues related to the Fresno County region. The current regional transportation plan, known as the Regional Transportation Plan & Sustainable Communities Strategy (RTP), was adopted in 2022. The RTP addresses GHG emissions reductions and other air emissions related to transportation, with the goal of preparing for future growth in a sustainable way. The plan specifies how funding will be sourced and financed for the region's planned transportation investments, ongoing operations, and

[2] Governor's Office of Planning and Research, "Technical Advisory on Evaluating Transportation Impacts in CEQA," December, 2018.

maintenance. The goals, objectives, and policies of the RTP are established to direct the courses of action that will provide efficient, integrated multimodal transportation systems to serve the mobility needs of people, including accessible pedestrian and bicycle facilities, and freight, while fostering economic prosperity and development, and minimizing mobile sources of air pollution. The five main goals of the RTP include:

- GOAL 1: Improved mobility and accessibility for all
- GOAL 2: Vibrant communities that are accessible by sustainable transportation options.
- GOAL 3: A safe, well-maintained, efficient, and climate-resilient multimodal transportation network
- GOAL 4: A transportation network that supports a sustainable and vibrant economy.
- GOAL 5: A region embracing clean transportation, technology, and innovation.

Fresno Council of Governments Multijurisdictional Local Road Safety Plan (MLRSP)

The MLRSP was completed in 2022 and provides an in depth look at areas of safety concern within the city of Clovis and other cities within the planning area. The report identifies priority segments and intersections in the city of Clovis and potential crash reduction treatments to apply. The plan also provides strategies for education, enforcement, engineering, and emergency services to improve safety outcomes. Intersections near the Master Plan Area which were identified in the 95th percentile of Crash Severity Scores include:

- Shepherd Avenue at Minnewawa Avenue
- Shepherd Avenue at De Wolf Avenue (western intersection)

Fresno County Congestion Management Process

In June 1990, California voters approved legislation that required Congestion Management Plans be developed in urbanized counties to address congestion on California's highways and roads. The Fresno County Congestion Management Process (CMP) implements this requirement, and its responsibilities include providing information on transportation system performance and assessing alternative strategies for alleviating congestion and improving mobility for people and goods to levels that meet State and local needs. The Fresno County CMP identifies four general objectives:

1. Optimize the transportation facilities through efficient system management;
2. Invest in strategies that reduce travel demand, improve system performance, increase safety, and provide effective incident management;
3. Reduce VMT by encouraging alternative modes of transportation and promotion of sustainable land use development; and
4. Improve public transit, extend bicycle and pedestrian systems, and promote car-sharing and bike-sharing programs to facilitate the development of an integrated multimodal transportation system in the Fresno region.

LOCAL

City of Clovis General Plan – Circulation Element

The City of Clovis adopted the General Plan[3] in August 2014 as an update to the previous General Plan approved in 1993. It serves as the City's guide for the continued development, enhancement, and revitalization of the City of Clovis. The following policies related to transportation and circulation are applicable to the Project:

- Policy 1.1. Multimodal network. The city shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.
- Policy 1.2. Transportation decisions. Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists.
- Policy 1.3. Age and mobility. The design of roadways shall consider all potential users, including children, seniors, and persons with disabilities.
- Policy 1.4. Jobs and housing. Encourage infill development that would provide jobs and services closer to housing, and vice versa, to reduce citywide vehicle miles travelled and effectively utilize the existing transportation infrastructure.
- Policy 1.5. Neighborhood connectivity. The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses).
- Policy 1.6. Internal circulation. New development shall utilize a grid or modified-grid street pattern. Areas designated for residential and mixed-use village developments should feature short block lengths of 200 to 600 feet.
- Policy 1.7. Narrow streets. The City may permit curb-to-curb dimensions that are narrower than current standards on local streets to promote pedestrian and bicycle connectivity and enhance safety.
- Policy 2.2. Multimodal LOS. Monitor the evolution of multimodal level of service (MMLOS) standards. The city may adopt MMLOS standards when appropriate.
- Policy 2.3. Fair share costs. New development shall pay its fair share of the cost for circulation improvements in accordance with the city's traffic fee mitigation program.
- Policy 2.4. Right-of-way dedication. The city may require right-of-way dedication essential to the circulation system in conjunction with any development or annexation. The City shall request the County of Fresno to apply the same requirements in the Clovis planning area.
- Policy 3.1. Traffic calming. Employ traffic-calming measures in new developments and existing neighborhoods to control traffic speeds and maintain safety.
- Policy 3.4. Road diets. Minimize roadway width as feasible to serve adjacent neighborhoods while maintaining sufficient space for public safety services.

[3] City of Clovis General Plan, August 25, 2014.

- Policy 3.5. Roadway widening. Only consider street widening or intersection expansions after considering multimodal alternative improvements to non-automotive facilities.
- Policy 3.6. Soundwalls. Design roadway networks to disperse traffic to minimize traffic levels. Discourage soundwalls along new collector and local streets when feasible.
- Policy 3.7. Conflict points. Minimize the number of and enhance safety at vehicular, pedestrian, and bicycle conflict points.
- Policy 3.8. Access management. Minimize access points and curb cuts along arterials and prohibit them within 200 feet of an intersection where possible. Eliminate and/or consolidate driveways when new development occurs or when traffic operation or safety warrants.
- Policy 3.9. Park-once. Encourage "park-once" designs where convenient, centralized public parking areas are accompanied by safe, visible, and well-marked access to sidewalks and businesses.
- Policy 3.10. Pedestrian access and circulation. Entrances at signalized intersections should provide sidewalks on both sides of the entrance that connect to an internal pedestrian pathway to businesses and throughout nonresidential parking lots larger than 50 spaces.
- Policy 3.11. Right-of-way design. Design landscaped parkways, medians, and right-of-ways as aesthetic buffers to improve the community's appearance and encourage non-motorized transportation.
- Policy 3.12. Residential orientation. Where feasible, residential development should face local and collector streets to increase visibility and safety of travelers along the streets and encourage pedestrian and bicycle access.
- Policy 5.2. Development-funded facilities. Require development to fund and construct facilities as shown in the Bicycle Transportation Plan when facilities are in or adjacent to the development.
- Policy 5.3. Pathways. Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger.
- Policy 5.4. Homeowner associations. The city may require homeowner associations to maintain pathways and other bicycle and pedestrian facilities within the homeowner association area.
- Policy 5.5. Pedestrian access. Require sidewalks, paths, and crosswalks to provide access to schools, parks, and other activity.

City of Clovis Active Transportation Plan (ATP)

The Clovis ATP was adopted in fall of 2023 and provides a vision for Clovis to complete a network of walking, biking and shared use trail facilities that are convenient, safe, and easy to use. The network should support and encourage travel between and within neighborhoods. The plan developed recommended bicycle, pedestrian and trail networks, and prioritized projects to meet the most need, more quickly. These prioritized projects were guided by the goals of the plan, which are listed below:

- Safety and Comfort – Improve the safety of people walking and biking.
- Connectivity – Develop a well-connected network of trails, walkways, and bikeways.

- Mode Shift – Increase the share of people who walk or ride a bike to get to work, school, shopping and other activities.
- Equity – Create a network that allows people of all physical abilities and socioeconomic circumstances the ability to travel safely throughout the city without a car.
- Recreation – Increase access to recreation by providing access to trails, walkways, and bikeways.

3.13.4 CEQA TRANSPORTATION ANALYSIS

The transportation analysis assesses how the study area's transportation system would operate with the implementation of the proposed Master Plan. This analysis includes effects that would result in significant impacts under the California Environmental Quality Act (CEQA) guidelines.

CEQA SIGNIFICANCE CRITERIA

The Project's impact is not considered to be significant unless it would:

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
b. Conflict or be inconsistent with CEQA Guideline section 15064.3, subdivision (b).
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
d. Result in inadequate emergency access.

Significance criteria "b" is related to the implementation of vehicle miles traveled (VMT) as the primary performance metric. The following criteria are used to assess a significant impact related to VMT consistent with the city of Clovis "Transportation Impact Analysis Guidelines" dated September 15, 2022:

- **Residential** – A proposed project exceeding a level of 13 percent below existing average VMT per capita in Fresno County.
    - Regional Average: 16.1 VMT/capita
    - Impact Threshold: 14.1 VMT/capita
- **Office** – A proposed project exceeding a level of 13 percent below existing average VMT per employee in Fresno County.
    - Regional Average: 25.6 VMT/employee
    - Impact Threshold: 22.3 VMT/employee
- **Retail** – A net increase in total VMT. The total VMT for the region without and with the project is calculated. The difference between the two scenarios is the net change in total VMT that is attributable to the project.

The General Plan has policies related to maintaining acceptable Levels of Service (LOS) outside of some permitted exceptions. However, LOS can no longer be used for CEQA evaluations and is

therefore not relevant to this memorandum focusing on CEQA impacts. Additional analyses of the Master Plan Area will be documented in another report that will detail LOS.

3.13.5 IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (Less than Significant)

The Proposed Project and its effects were compared against local, regional, and state programs, plans, ordinances, and policies addressing the circulation system, as described previously. The documents governing the plans and policies addressing the circulation system in the area and a discussion of whether the proposed Project would conflict with them include:

- Fresno Council of Governments Regional Transportation Plan (RTP)
    - The goals, objectives, and policies of the RTP are established to direct the courses of action that will provide efficient, integrated multimodal transportation systems to serve the mobility needs of people, including accessible pedestrian and bicycle facilities, and freight, while fostering economic prosperity and development, and minimizing mobile sources of air pollution.

      The Project objectives include providing infrastructure that meets City standards and is integrated with existing and planned facilities while also providing a strong pedestrian network to link local commercial and neighborhood together. This is consistent with the RTP since it would be accessible, provide a safe multimodal transportation network, and support a sustainable and vibrant economy by providing housing types, sizes, and densities that provide for local and regional housing needs.

- Fresno Council of Governments Multijurisdictional Local Road Safety Plan (MLRSP)
    - This plan identifies priority intersections and segments and potential reduction treatments to improve the safety of transportation infrastructure with the highest crash severity scores. Two of the intersections identified are within the study area for the transportation analysis. Since the Project is not proposing modification at the two identified intersections, the Project would not interfere with the implementation of the MLRSP.

- Fresno County Congestion Management Process (CMP)
    - The CMP is responsible for monitoring the transportation infrastructure and developing deficiency plans to improve the transportation infrastructure that is not meeting standards. The Project is proposing development in a Master Plan Area and is not anticipated to affect intersections and roadway segments that are not

internal or abutting the Project. There are no anticipated design features that would prevent the normal analysis and deficiency reporting for the CMP.

- City of Clovis General Plan
    - The overarching goal of the General Plan circulation element is to create a comprehensive and well-maintained multimodal circulation system that provides for the safe and efficient movement of people and goods. This includes goals for "complete streets," making bicycle and transit networks a functional alternative, and a complete system of trails and pathways assessable to all. This aligns with the Project objectives which call for a Project that integrates and supports active and public transportation, encourage walkability and safe pedestrian/bicycle routes to all land uses, and a system of trails, parks, and open spaces that connect logically with greater Clovis.

- City of Clovis Active Transportation Plan (ATP)
    - The ATP identifies roadways where planned bicycle and pedestrian infrastructure will be implemented. In addition to providing internal roadways that provide multimodal streets per the General Plan, the Project would be required to improve its frontage which would help the ATP in filling in gaps in the bicycle and pedestrian network such as along Shepherd Avenue. The Project is not anticipated to affect transportation infrastructure away from the boundaries in a way that would prevent the proposed network in the ATP from being completed.

Based on this assessment, the Project is not anticipated to conflict with policies, plans, and programs addressing the circulation system for alternative modes. Therefore, the impact would be **less than significant,** and no mitigation measures would be required.

Impact 3.13-2: The proposed project would conflict with or be inconsistent with CEQA Guideline section 15064.3, subdivision (b). (Significant and Unavoidable)

The Fresno COG activity-based travel demand model was used to estimate base year (2019) VMT for the transportation analysis zones (TAZs) that comprise the Project. Table 3.13-3 presents VMT per capita and VMT per employee findings for base year conditions in Fresno County and for the Project at buildout. The Project is considered to have a significant impact if the VMT per capita or VMT per employee of the Project exceeds a threshold based on 13 percent below the regional averages for Fresno County.

TABLE 3.13-3: VMT PER CAPITA AND PER EMPLOYEE

	VMT PER CAPITA	*VMT PER EMPLOYEE*
Fresno County	16.1	25.6

Impact Threshold (13% below regional average)	14.1	22.3
Project Area	30.4	44.3
Percent Compared to Impact Threshold	+116%	+99%
Significant Impact	Yes	Yes

Source: Kittelson & Associates, 2024, based on Fresno COG travel model and VMT calculation tool

Table 3.13-4 lists the total regional daily VMT for the base year with the Project, without the retail commercial component and with the retail commercial component. The total regional VMT is projected to decrease with the addition of retail commercial uses within the Project. This indicates that the proposed retail uses would provide services close to residents and reduce the need to make longer trips to access services.

The Project would exceed the impact thresholds for both residential and employment land uses. This would have a **potentially significant impact** for residential and employment uses warranting feasible mitigation measure. The Project's retail uses would decrease total regional VMT. This would have a **less than significant impact** for retail uses.

TABLE 3.13-4: REGIONAL VMT WITHOUT AND WITH RETAIL

	TOTAL REGIONAL DAILY VMT
With Project Without Retail	22,029,977
With Project With Retail	22,026,474
Difference	-3,503
Significant Impact	No

Source: Kittelson & Associates, 2024, based on Fresno COG travel model

Mitigation for VMT significant impacts for residential and employment uses would include Mitigation Measures 3.13-1 through 3.13-5. The potential effectiveness of mitigation measures for VMT has been estimated using the CAPCOA *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*.[4]

VMT reduction depends on factors such as actual implementation of planned land use development, demographic change, household preferences for housing types and locations, the cost of fuel, and the competitiveness of transit relative to driving, which relates to congestion along vehicular commute routes that are not under the Project's jurisdiction, as well as transit provided

[4] California Air Pollution Control Officers Association (CAPCOA), *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, December, 2021, https://www.airquality.org/ClimateChange/Documents/Final%20Handbook_AB434.pdf

by parties other than the Project or the city of Clovis. The feasibility and effectiveness of the mitigation measures is either insufficient or unknown at this time. The Project cannot demonstrate definitively that implementation of these policies would achieve VMT reductions to meet the VMT per capita or VMT per employee thresholds. With implementation of the Project and the recommended mitigation measures, this impact would remain **significant and unavoidable.**

Mitigation Measure 3.13-1: *Future employers within the Project shall implement a commute trip reduction program, consistent with other trip reduction programs in the City of Clovis. The program would include the following components:*

- *trip reduction targets*
- *measures to discourage single occupancy vehicles while encouraging alternative modes of transportation such as carpooling, ridesharing, vanpooling, subsidized transit passes and other benefits,*
- *include a guaranteed ride home for eligible employers,*
- *establish applicable fees and funding mechanisms,*
- *define monitoring measures and frequency, and strategies for non-compliance.*

The CAPCOA Handbook Measure T-5 estimates that a voluntary commute trip reduction program can reduce commute VMT by up to 4.0 percent with full participation of all eligible employees. Commute VMT to and from employers within Vista Ranch is projected to account for a maximum of 7.5 percent of total VMT. Therefore, the maximum VMT reduction from a commute trip reduction program would be 4.0 percent times 7.5 percent or 0.3 percent VMT reduction.

Mitigation Measure 3.13-2: *Provide bicycle facilities that include bike parking and bike lockers. The CAPCOA Handbook Measure T-10 estimates that provision of end-of-trip bicycle facilities can reduce commute VMT by up to 4.4 percent depending on the existing propensity for commuters to use bicycles. The potential VMT reduction for employers in Clovis is estimated at 0.61 percent. Commute VMT to and from employers within Vista Ranch is projected to account for a maximum of 7.5 percent of total VMT. Therefore, the maximum VMT reduction from bicycle end-of-trip facilities would be 0.61 percent times 7.5 percent or 0.05 percent VMT reduction.*

Mitigation Measure 3.13-3: *Provide a well-connected street network, particularly for non-motorized connections. Characteristics of street network connectivity include short block lengths, numerous three and four-way intersections, and minimal dead-ends (cul-de-sacs). Street connectivity helps to facilitate shorter vehicle trips and greater numbers of walk and bike trips and thus a reduction in VMT. CAPCOA Handbook Measure T-17 uses increased vehicle intersection density as a proxy for street connectivity improvements. The CAPCOA Handbook estimates that VMT can be reduced up to 30 percent if a development provides a street grid that has much greater density (up to about three times) of streets and street intersections than the average American street grid density of 36 street intersections per square mile.*

Based on the Vista Ranch Illustrative Plan in the September 15, 2023 Draft of the Vista Ranch Master Development Plan, there would be approximately 53 intersections within the Master Plan area that would provide direct network connectivity connecting clusters of housing with other clusters and the main street network. The total Master Plan area is approximately 507 acres (0.79 square mile), resulting in an average intersection density of about 67 street intersections per square mile providing street network connectivity for all modes of travel. The proposed intersection density would be 86 percent higher than the American average. Therefore, the proposed street grid would be expected to provide up to a 12 percent reduction in VMT compared to typical development areas.

The proposed site plan shows that many of the local streets and residences would be separated from the collectors and arterials within the site by walls or fencing except at a relatively small number of vehicle access intersections. Adding additional bicycle and pedestrian access points through these walls or fences to facilitate more direct pedestrian and bicycle connections has the potential to reduce VMT by providing more direct paths of travel between the various neighborhoods for non-auto modes.

Mitigation Measure 3.13-4: *Increase the length of the area bicycle network, including separated trails available to bicycles as well as on-street bike lanes. The Project proposes to add 4.5 miles of Class I separated trails. This would increase the mileage of bicycle facilities in Clovis from the existing 21.2 miles to 25.7 miles, an increase of 21 percent. The CAPCOA Handbook Measure T-20 estimates that a 21 percent increase in bike network mileage could reduce citywide VMT by 0.01 percent. The total daily VMT generated in Clovis is approximately 4,285,900, so the Project bike network would reduce daily VMT by approximately 350. This would represent a 0.2 percent reduction from the unmitigated Project total daily VMT of 188,900. Note that these VMT reductions would occur citywide and would not exclusively affect Project trips.*

Mitigation Measure 3.13-5: *Contribute to implementation of expanded transit service in Clovis, including potentially service to the Project area. Implementation of expanded transit service would require both capital expenditures for support facilities, including construction of transit stops and facilitating extensions of future transit routes. The CAPCOA Handbook Measure T-25 estimates that a 25 percent increase in transit service hours could reduce citywide VMT by 0.3 percent. The total daily VMT generated in Clovis is approximately 4,285,900, so the expanded transit network would reduce daily VMT by approximately 12,600. This would represent a 6.7 percent reduction from the unmitigated Project total daily VMT of 188,900. Note that these VMT reductions would occur citywide and would not exclusively affect Project trips.*

CONCLUSION

The Vista Ranch Master Plan has incorporated best available planning practices to mitigate VMT attributable to the Project, including walkable school sites, walkable commercial retail, walkable community amenities, addition of NEV lanes/bike lanes and connective sidewalks to Master Plan amenities, including parks and open space. The trail network would provide connectivity throughout the community and connectivity to the existing and planned Clovis trail network. The proposed

compact building design would feature a modest increase in density compared to other comparable development. The Project neighborhoods are designed with grid-like short blocks throughout. The circulation plan features traffic calming measures including roundabouts and curb bump outs. The Project has planned for transit by inclusion of three transit stop locations. The proposed transit stop locations would provide a natural extension of the existing City of Clovis transit routes on Temperance Avenue. The Project is designed to encourage ability to work from home, with fiber optic internet services to be provided by AT&T and Comcast. Regardless of the best practices planning measures, it cannot be conclusively demonstrated that the VMT will be reduced to level of less than significant level with implementation of the mitigation measures, and this impact would remain **significant and unavoidable**.

Impact 3.13-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant)

The Master Plan Area implements a desire for a mixed use planned community as depicted in the city of Clovis General Plan and proposed an amended Focus Area 13a. The proposed Master Plan will be a designated land use of Mixed Use Village, with multiple zoned districts, within Focus Area 13a. The Master Plan Area includes the following guiding principles related to transportation and hazards:

- Provide infrastructure that meets City standards and is integrated with existing and planned facilities and connections.
- Develop a strong pedestrian network that links activities, recreational amenities, local commercial and neighborhoods together.
- Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet City standards.

Buildout of the proposed Master Plan would result in some changes to the City's circulation network in the vicinity of the project but would not increase hazards or incompatible uses due to design features. All future roadway system improvements associated with development activities under the Master Plan would be designed in accordance with the established roadway design standards, and as depicted in the Circulation Element of the General Plan.

These improvements will be subject to review and future consideration by the City of Clovis. An evaluation of the roadway alignments, intersection geometrics, and traffic control features will be needed during development application. Roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, and would have to meet design guidelines such as the accessibility requirements of Title 24 (California Building Code), ADA and PROWAG standards, California Manual of Uniform Traffic Control Devices (MUTCD), and the Caltrans Roadway Design Manual.

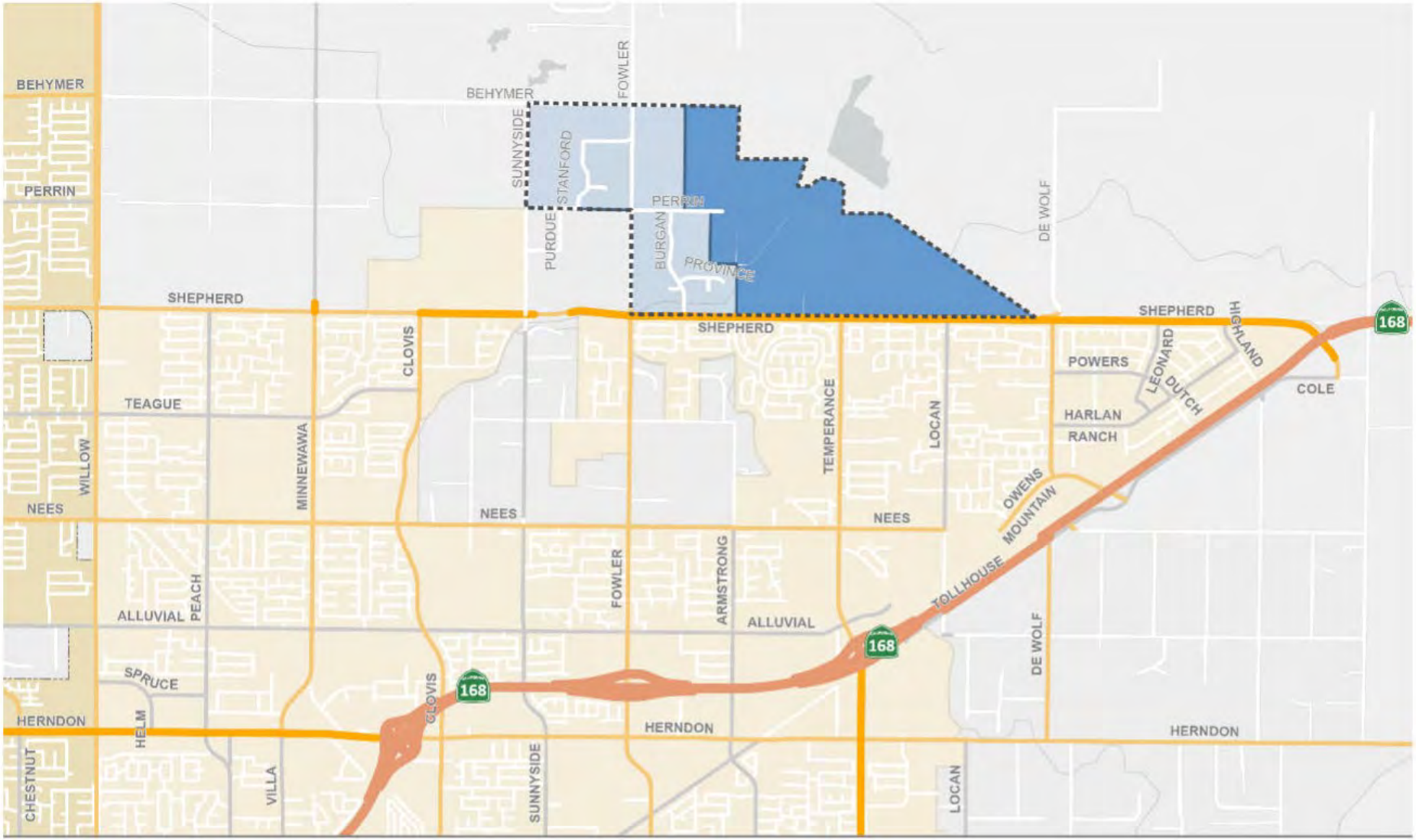
Implementation of the Master Plan would not result in hazardous conditions or create conflicting uses. With implementation of policies and ordinance listed in this report, and application of the conditions of approval at the time of review of land development projects, the Master Plan would be designed to ensure that no hazardous circulation conditions are created as a result of implementation of the proposed project. The Master Plan would implement components of the roadway system consistent with the City's standards and guidelines. Therefore, potential impacts related to hazards due to a geometric design feature or incompatible uses would be **less than significant**, and no mitigation measures would be required.

Impact 3.13-4: The proposed project would result in adequate emergency access. (Less than Significant)

Emergency response requires a balance of emergency response time and evacuation needs with other community concerns, such as urban design, walking and biking needs, and traffic calming. Future roadway improvements associated with buildout of the Master Plan Area would be made in accordance with the city of Clovis General Plan Circulation Element and roadway functional design guidelines.

With the application of the conditions of approval at the time of review of land development projects, the Master Plan Area would be designed to ensure that adequate emergency access is provided. The Master Plan would implement components of the roadway system consistent with the City's General Plan. Therefore, impacts related to inadequate emergency access would be **less than significant**, and no mitigation measures would be required.

This page intentionally left blank.



LEGEND

SOI Expansion Vista Ranch

- Project Area
- Sphere of Influence Expansion
- Master Plan Area

Agency Boundaries

- City of Clovis
- County of Fresno
- City of Fresno

Funcitonal Classification

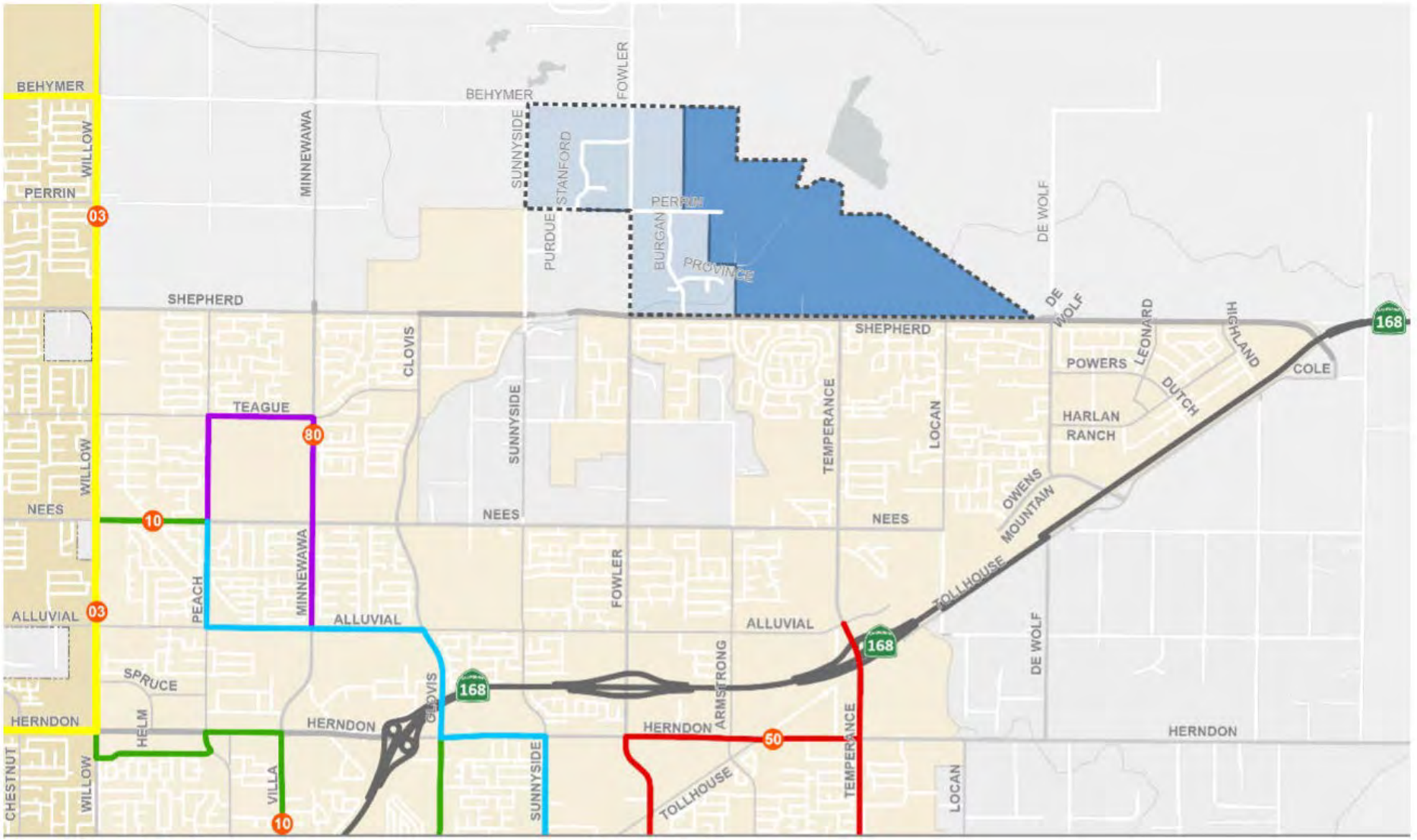
Local, Collector, Arterial, Super Arterial, Expressway, Freeway

Figure 3.13-1. Vista Ranch Project and Study Area

Sources: Kroll & Associates. Map date: June 30, 2024.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND

- Project Area
- Sphere of Influence Expansion
- Master Plan Area

Agency Boundaries

- City of Clovis
- County of Fresno
- City of Fresno

Transit Routes

Fresno Area Express

- 03

Clovis Transit

- 10
- 50
- 80
- 10 & 80

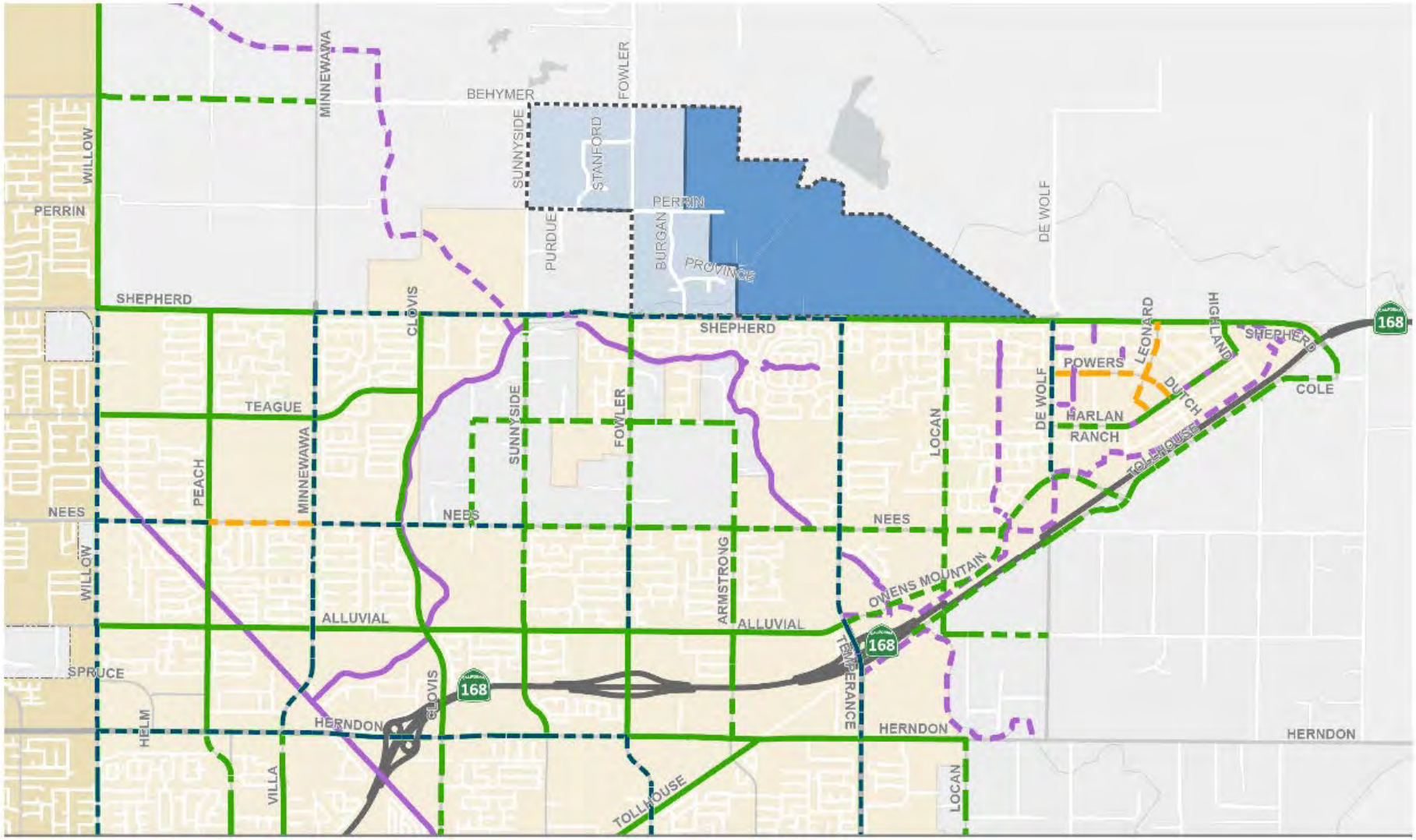
SOI Expansion Vista Ranch

Figure 3.13-2. Existing Transit Service in the Study Area

Sources: Kroll & Associates. Map date: June 30, 2024.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND

- Project Area
- Sphere of Influence Expansion
- Master Plan Area

Agency Boundaries

- City of Clovis
- County of Fresno
- City of Fresno

Planned Bike Network

- Bike Route (Class III)
- Bike Lane (Class II)
- Buffered Bike Lane (Class II)

Existing Bike Network

- Bike Lane (Class II)

Trail Network

- Existing
- Planned

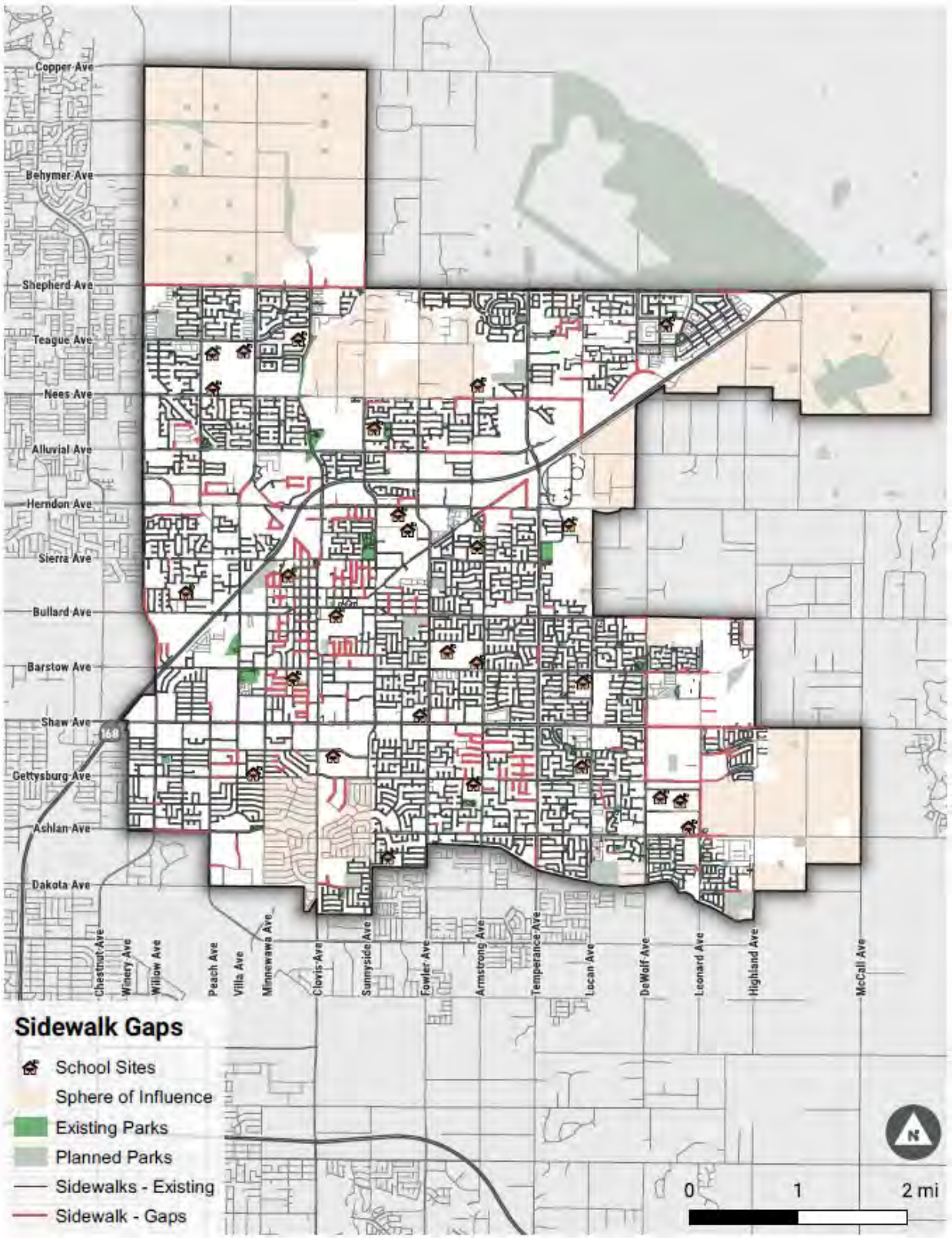
Sources: Kroll & Associates. Map date: June 30, 2024.

SOI Expansion Vista Ranch

Figure 3.13-3. Existing and Proposed Bike Facilities in the Study Area

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



SOI Expansion Vista Ranch

Figure 3.13-4. Existing and Missing Sidewalks in the Study Area

Sources: Kroll & Associates. Map date: June 30, 2024.

This page intentionally left blank.

This section describes the regulatory setting, impacts associated with wastewater services, water services, storm drainage, and solid waste disposal that are likely to result from Project implementation, and measures to reduce potential impacts to wastewater, water supplies, storm drainage, and solid waste facilities.

Information in this section is derived in part from the *Technical Memorandum, Wastewater Hydrologic Modeling Study, Vista Ranch Development,* prepared by Akel Engineering Group, Inc., dated May 2024, and included in its entirety as Appendix J; the Water Supply Assessment, Vista Ranch, prepared by Provost & Pritchard Consulting Group, dated March 2024, and included in its entirety as Appendix K; and the *Water Infrastructure Investigation for Vista Ranch and Surrounding Areas Memorandum*, prepared by Provost & Pritchard Consulting Group, dated April 12, 2024, and included in its entirety as Appendix L. This section is also based on the following:

- *City of Clovis Urban Water Management Plan 2020 Update (Provost & Pritchard Consulting Group, 2021);*
- *City of Clovis Water Shortage Contingency Plan 2020 Update (Provost & Pritchard Consulting Group, 2021);*
- *City of Clovis Water Master Plan Update Phase III (Provost & Pritchard Consulting Group, 2017);*
- *City of Clovis Wastewater Collection System Master Plan, Master Plan Update Phase 3* (*Blair, Church & Flynn Consulting Engineers, 2017*)*;*
- *City of Clovis Recycled Water Master Plan (Provost & Pritchard, 2017);*
- *2014 Master Service Plan Update (City of Clovis, 2014);*
- *Fresno-Clovis Storm Water Quality Management Program (2013);*
- *California Department of Resources Recycling and Recovery, SWIS Facility/Site Activity Details (2024); and*
- *California Department of Resources Recycling and Recovery, RDRS Report 2 (2024).*

Three comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic from the following: County of Fresno Department of Public Works and Planning (November 3, 2023); Fresno Irrigation District (November 7, 2023); Fresno Metropolitan Flood Control District (November 17, 2023). These comments are addressed within this section. Full comments received are included in Appendix A.

3.14.1 WASTEWATER SUPPLY

ENVIRONMENTAL SETTING

Most of the Project site is not served by wastewater infrastructure. An existing 12-inch sewer main underlies a portion of Shepherd Avenue (to the west of Armstrong Avenue), within the Non-

Development Area.[1] There is no existing wastewater infrastructure within the Development Area. Clovis does not currently provide wastewater service to the Project site, as the site is located outside the City limits. Residences within the Project site is currently on septic systems.

Wastewater Collection System

The City owns and maintains a wastewater collection system comprised of 428 miles of pipes and five lift stations.[2] The wastewater collection system is divided into seven major service areas.[3] Under existing conditions, most of the City core (Herndon, Fowler, Sierra, and Peach service areas) discharges into the City's regional trunks, which convey flows to the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) located in southwest Fresno. Flows from the Southeast Service Area are conveyed to the Clovis Sewer Treatment - Water Reuse Facility (ST-WRF) in southeast Clovis.[4] The remaining two service areas (Northwest and Northeast) represent future growth areas and are planned to discharge to the ST-WRF.[5] The Development Area is located within the City's Northwest Service Area.

According to the 2017 Wastewater Collection System Master Plan, the City currently generates an average daily flow of approximately 7.0 million gallons per day (mgd) of wastewater and has capacity to treat approximately 12.1 mgd.[6] Under the land uses proposed in the General Plan, the City is projected to generate and have capacity for an average daily flow of approximately 18.6 mgd.[7] In 2020, the City generated an average daily flow of approximately 7.8 mgd of wastewater;

[1] Akel Engineering Group, Inc., Technical Memorandum, Wastewater Hydrologic Modeling Study, Vista Ranch Development. January 2024.

[2] Blair, Church & Flynn Consulting Engineers, Wastewater Collection System Master Plan, Master Plan Update Phase 3. April 2017. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2017-Draft-Wastewater-Master-Plan.pdf. Accessed February 2024.

[3] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[4] Akel Engineering Group, Inc., Technical Memorandum, Wastewater Hydrologic Modeling Study, Vista Ranch Development. January 2024.

[5] Blair, Church & Flynn Consulting Engineers, Wastewater Collection System Master Plan, Master Plan Update Phase 3. April 2017. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2017-Draft-Wastewater-Master-Plan.pdf. Accessed February 2024.

[6] Blair, Church & Flynn Consulting Engineers, Wastewater Collection System Master Plan, Master Plan Update Phase 3 (Table 1-2). April 2017. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2017-Draft-Wastewater-Master-Plan.pdf. Accessed February 2024.

[7] Blair, Church & Flynn Consulting Engineers, Wastewater Collection System Master Plan, Master Plan Update Phase 3 (Table 1-2). April 2017. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2017-Draft-Wastewater-Master-Plan.pdf. Accessed February 2024.

approximately 5.6 mgd was conveyed to the RWRF and approximately 2.2 mgd was conveyed to the ST-WRF.[8]

Wastewater Treatment Facilities

Through a Joint Powers Agreement with the City of Fresno, the City of Clovis conveys the majority of its wastewater to the RWRF and is entitled to a maximum capacity of 9.3 mgd.[9] The RWRF is operated by the City of Fresno and currently has a maximum capacity of 80 mgd. The City has the capability to acquire additional capacity at the RWRF, if needed.

The Clovis ST-WRF began service in 2009.[10] The plant serves the new growth areas of the City in the Southeast and is planned to serve the Northwest and Northeast service areas. The facility has treatment capacity for an average daily flow of 2.8 mgd of wastewater. Planned expansions of the facility will increase capacity to 8.4 mgd.

REGULATORY SETTING

Clean Water Act (CWA) / National Pollutant Discharge Elimination System (NPDES) Permits

The CWA is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."[11]

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program, which makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority. NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, stormwater associated with numerous kinds of industrial activity, runoff

[8] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[9] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[10] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-17-Utilities-and-Service-Systems.pdf. Accessed February 2024.

[11] United States Environmental Protection Agency, Introduction to the Clean Water Act. Available at: https://cfpub.epa.gov/watertrain/moduleFrame.cfm?parent_object_id=2569. Accessed March 2024.

from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by the CWA "pretreatment" program.

The City's current Waste Discharge Requirements and Master Recycling Permit for the ST-WRF, which regulates the wastewater effluent quantity and quality upon discharge, was issued by the Central Valley Regional Water Quality Control Board and is Order R5-2019-0021 NPDES No. CA0085235.[12]

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State is required to adopt policies, plans, and objectives that will protect the State's waters for the use by and enjoyment of Californians. In California, the State Water Resources Control Board (SWRCB) has the authority and responsibility for establishing policy related to the State's water quality. Regional authority is delegated by the SWRCB to a Regional Water Quality Control Board (RWQCB). The Porter-Cologne Act authorizes the SWRCB and RWQCB to issue NPDES permits.

Under the Central Valley RWQCB NPDES permit system, all existing and future municipal and industrial discharges to surface water within the City would be subject to regulation. NPDES permits are required for operators of municipal separate storm sewer systems, construction projects, and industrial facilities. These permits contain limits on the amount of pollutants that can be contained in each facility's discharge.

City of Clovis General Plan

The City of Clovis General Plan includes several policies relevant to utilities, including wastewater. General Plan policies applicable to the Project are identified below:[13]

[12] California Regional Water Quality Control Board, Waste Discharge Requirements and Master Recycling Permit for the City of Clovis, Sewage Treatment and Water Reuse Facility, Fresno County (Order R5-2019-0021, NPDES No. CA0085235). https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/fresno/r5-2019-0021.pdf. Accessed March 2024.

[13] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February 2024.

Policies: Land Use Element

- Policy 3.5: Fiscal sustainability. The City shall require establishment of community facility districts, lighting and landscaping maintenance districts, special districts, and other special funding or financing tools in conjunction with or as a condition of development, building or permit approval, or annexation or sphere of influence amendments when necessary to ensure that new development is fiscally neutral or beneficial.

Policies: Public Facilities & Services Element

- Policy 1.1: New development. New development shall pay its fair share of public facility and infrastructure improvements.
- Policy 1.3: Annexation. Prior to annexation, the city must find that adequate water supply and service and wastewater treatment and disposal capacity can be provided for the proposed annexation. Existing water supplies must remain with the land and be transferred to the City upon annexation approval.
- Policy 1.4: Development-funded facilities. The City may require developments to install onsite or offsite facilities that are in excess of a development's fair share. However, the City shall establish a funding mechanism for future development to reimburse the original development for the amount in excess of the fair share costs.
- Policy 1.6: Master plans. Periodically update water, recycled water, wastewater, and stormwater master plans and require all new development to be consistent with the current master plans.
- Policy 1.8: Water facility protection. Protect existing and future water, wastewater, and recycled water facilities from encroachment by incompatible land uses that may be allowed through discretionary land use permits or changes in land use or zoning designations.

City of Clovis Municipal Code

Chapter 3.10, Development Impact Fees, of the City of Clovis Municipal Code establishes a uniform set of procedures applicable to AB 1600 development impact fees.[14]

Municipal Code Chapter 6.4, Sewage Disposal, pertains to the sewer system.[15] This chapter establishes the sewer connections and permit conditions required to safely create a functioning sewer system both in tandem with the City system, and outside the City. Chapter 6.4 also establishes sewer service charges and fees to be used towards the cost of the construction, or for the reimbursement of the cost of the construction, of sewer lift stations, sewer pump facilities, and associated force mains within the service area for which the fee was collected.

[14] City of Clovis Municipal Code, Chapter 3.10, Development Impact Fees. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis03/Clovis0310.html#3.10. Accessed March 2024.

[15] City of Clovis Municipal Code, Chapter 6.4, Sewage Disposal. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis06/Clovis0604.html#6.4. Accessed March 2024.

Municipal Code Chapter 8.6, Plumbing Code adopts the California Plumbing Code, with amendments, for the purpose of regulating plumbing systems.[16]

City of Clovis Wastewater Master Plan

The Clovis Wastewater Master Plan Update, Phase 3 (2017 Wastewater Master Plan) is the latest phase of an effort begun in 1995 to update the City's Wastewater Master Plan. The 2017 Wastewater Master Plan addresses the conditions and necessary capital improvements of the City's wastewater system for planned urban growth under the 2014 Clovis General Plan. The 2017 Wastewater Master Plan generally consisted of developing design criteria, defining wastewater service areas, developing wastewater flow projections, analyzing and designing collection system pipelines, and summarizing results.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on wastewater utilities and service systems if it would:

- Require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects; and/or
- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the project's projected demand in addition to the providers existing commitments.

IMPACTS AND MITIGATION MEASURES

Impact 3.14-1: The proposed Project would not result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the Project's projected demand in addition to the providers existing commitments. (Less than Significant)

The Master Plan would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines and would ultimately be conveyed to the ST-WRF, as well as receiving treatment at the existing RWRF in the City of Fresno through the Fowler Service area.

The proposed Project would increase the amount of wastewater requiring treatment. The City's 2017 Wastewater Master Plan Update estimates wastewater generation rates for single family

[16] City of Clovis Municipal Code, Chapter 8.6, Plumbing Code. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis08/Clovis0806.html#8.6. Accessed March 2024.

residential uses to be 175 gallons per day per dwelling unit for single family residential land uses and 142 gallons per day per dwelling unit for multi-family land uses.[17] The Project site includes up to 3,286 residential units, including single- and multi-family units. Conservatively assuming the Project would develop entirely with single family dwelling units and using the rate of 175 gallons per day per single family dwelling unit, the proposed Project would generate approximately 575,050 gallons per day (or 0.575 mgd) of wastewater. This is a conservative estimate, as the Project is anticipated to develop with a mix of single- and multi-family units and would therefore generate a lower amount of wastewater. Hydraulic modeling updates represent more flexibility in construction and unit types, which estimated the Project's average dry weather flow at approximately 0.513 mgd of wastewater.[18]

Occupancy of the proposed Project would be prohibited without sewer allocation. An issuance of sewer allocation from the City's available capacity would ensure that there would be a final determination by the wastewater treatment and/or collection provider that there is adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the RWRF with a subsequent allocation of capacity to the proposed Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments.

Wastewater treatment may also be provided by the City of Clovis Water Reuse Facility. ST-WRF serves the new growth areas of the City in the southeast, northwest, and ultimately the northeast urban centers. The ST-WRF is currently in compliance with the WDR requirements of Order Number No. 5-2019-0021 (NPDES Permit No. CA0085235). The projected flows of the proposed Project are not expected to exceed the treatment capacity available for treatment. Full buildout of the proposed Project would slightly increase the existing treatment demand at the ST-WRF. As described above, the City must also periodically review and update their Utility Master Plans, including the Wastewater Master Plan, and as growth continues to occur within the City, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. The ST-WRF is designed to accommodate future expansion and would ultimately treat 8.4 mgd, in addition to the 9.3 mgd at the RWRF. These pre-existing proactive efforts ensure the City would be able to reliably treat the wastewater as the community expands its population up to and through the next plant expansion, including with implementation of the proposed Project.

A majority of the Master Plan has been planned for urban uses and is identified in the City's General Plan as being located within the Northeast Urban Center and specifically, within Focus Area 13. As such, the Master Plan has been anticipated for potential development. Given that projected wastewater generation volumes associated with the buildout of the Master Plan would not exceed

[17] Blair, Church & Flynn Consulting Engineers, City of Clovis Wastewater Collection System Master Plan, Master Plan Update Phase 3. Draft Final Report. April 5, 2017. Pages 4-11.

[18] Akel Engineering Group Inc., Technical Memorandum, Wastewater Hydraulic Modeling Study, Vista Ranch Development, Final, May 2024. Table 1.

the projected wastewater generation volumes described in the Wastewater Master Plan, this impact would be ***less than significant***, and no mitigation is required.

Impact 3.14-2: The proposed Project would not require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects. (Less than Significant)

As Clovis continues to develop in the future, there will be an increased need for wastewater services. These needs have been addressed in the Clovis Wastewater Master Plans and will require the City to continue to implement capital improvements to the wastewater system, including improvements to some pump stations and sewer mains, and expansion of the ST-WRF, when triggered by growth.

The Master Plan would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public streets and public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines and would ultimately be conveyed to the ST-WRF, although in the interim it may receive treatment at the existing RWRF in the City of Fresno.

The wastewater collection and conveyance system that would serve the proposed Project would be engineered consistent with the City's existing infrastructure requirements. New wastewater collection and conveyance infrastructure needed for the proposed Project would require trenching/excavation of earth and placement of pipe within the trenches at specific locations, elevations, and gradients.

Future phases of the Project would require new wastewater infrastructure that would extend beyond the proposed Project boundaries. The precise nature and size of these improvements has not yet been determined; however, it is anticipated that these extended wastewater infrastructure improvements be within existing rights-of-way. Final utility engineering for the Project will be completed for these future improvements, and potential wastewater servicing strategies have been developed to consider site specific conditions and topography. Two potential alternatives were evaluated as part of the hydraulic modeling for the Project. The first alternative consists of routing flows south into the existing 12-inch pipe at Armstrong Avenue and Everglade Avenue. All flows would continue south along Armstrong Avenue and ultimately connect into the 36-inch Fowler Avenue Trunk. The second alternative consists of routing flows south and southwest into two separate trunk systems, with Phase 1 flows conveyed into the City's existing 12-inch pipe at Armstrong Avenue and Everglade Avenue, while Phase 2 flows would be conveyed into the City's existing 15-inch pipe at Shepherd Avenue and Fowler Avenue. Phase 1 flows would ultimately be

conveyed into the Fowler Avenue Trunk, while Phase 2 flows would discharge southwest into the 33-inch Herndon Avenue Trunk.[19]

The applicant would refine the wastewater collection/conveyance infrastructure design through the development of improvement plans which undergo review by the City of Clovis Engineering Department to ensure consistency with the City's standards and specifications. This improvement plan process would include full engineering design (i.e., location, depth, slope, etc.) of all conveyance infrastructure as well as a review of new sewer pump stations and new force mains if needed.

CONCLUSION

The construction of new wastewater system infrastructure associated with future buildout of the proposed Project has the potential to cause environmental impacts. Although upgrades and improvements to the wastewater system may be required in order to serve the proposed Project, this would not cause additional significant environmental effects due to the proposed Project, as such potential improvements have already been planned for. The potential for environmental impacts associated with the installation of the wastewater system and all construction activities within the Master Plan are addressed throughout this EIR. No additional impacts associated with the proposed Project's wastewater improvements are anticipated beyond what is already discussed throughout this EIR. As such, the installation of the wastewater collection and conveyance system infrastructure to serve the proposed Project would have a ***less than significant*** impact relative to this topic.

3.14.2 WATER SUPPLIES

ENVIRONMENTAL SETTING

The Project site is not currently within the boundaries of a domestic water service provider, and is served by private wells.

The City of Clovis water service area encompasses the City limits and the small unincorporated community of Tarpey Village and services a population of approximately 122,350.[20] An existing 16-inch water main underlies East Shepherd Avenue.[21] In accordance with the Urban Water Management Planning Act and California Water Code, the City prepared and adopted the City of Clovis Urban Water Management Plan 2020 Update (2020 UWMP). The purpose of the UWMP is to maintain efficient use of urban water supplies, continue to promote conservation programs and

[19] Akel Engineering Group Inc., Technical Memorandum, Wastewater Hydraulic Modeling Study, Vista Ranch Development, Final, May 2024. Pages 3-4.

[20] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[21] Provost & Pritchard Consulting Group, Water Infrastructure Investigation for Vista Ranch and Surrounding Areas Memorandum. April 12, 2024.

policies, ensure that sufficient water supplies are available for future beneficial use, and provide a mechanism for response during water drought conditions. The 2020 UMWP addresses the City's water management planning efforts to assure adequate water supplies to meet forecast demands through 2040.

Water Sources and Facilities

The City of Clovis' water system relies on three main water supply sources: groundwater, surface water, and recycled water.[22] Each water source is described in more detail below.

GROUNDWATER

Groundwater is the primary water source for the City, with 12,105 acre-feet (AF) pumped in 2020, which accounted for nearly half (49 percent) of the total potable water use.[23] Groundwater is pumped from the Kings Subbasin, which underlies the City of Clovis and the Project site, and is part of the San Joaquin Valley Groundwater Basin. The 2020 UWMP documented a sustainable amount of groundwater that can be extracted from year to year and replenished through naturally occurring groundwater recharge. The City will continue to increase its surface water and recycled water supply usage to a point where groundwater extraction is less than the sustainable yield in a normal year. The sustainable yield is currently estimated at 9,400 acre-feet per year (AFY) for the SOI, without the need for additional recharge.[24]

The City currently obtains groundwater from 36 active wells and one standby well, which have a total capacity of approximately 37,690 gallons per minute (gpm).[25] There are also six planned wells, adding an additional planned capacity of 4,750 gpm. A number of wells are offline or on standby due to water quality concerns, or are inactive due to being dry or producing too much sand. Wells are spaced at intervals across the City and are connected to the distribution system.[26] The pipes are sized for local distribution and have, in certain instances, presented some restrictions to cross-town water supply distribution. The transmission network consists primarily of 12-inch mains on a one-

[22] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[23] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[24] California Department of Water Resources, Bulletin 118 Groundwater Basin Lookup. Available at: https://dwr.maps.arcgis.com/apps/Styler/index.html?appid=740d10eefd6148579321a3abcd065a36. Accessed February 2024.

[25] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[26] Provost & Pritchard Consulting Group, City of Clovis Water Master Plan Update Phase III. April 2017. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2017-Draft-Water-Master-Plan.pdf. Accessed March 2024.

half mile grid with extensive looping. The wells are controlled by a telemetry system that controls pump operation as well as independent controls in case of remote computer failure. The production rate of the existing wells varies from approximately 300 gpm to approximately 2,200 gpm. As the City continues to grow, it intends to expand its surface water supply use, recycled water use, and to continue intentional groundwater recharge efforts to relieve pressure on the groundwater aquifer.

SURFACE WATER

The City has access to surface water through several different contracts, which are delivered to the City by the Fresno Irrigation District (FID).[27] Surface water supplies are from the Kings River and Central Valley Project (CVP). Two additional water districts are located within the City's General Plan Boundaries: Garfield Water District (GWD) and International Water District (IWD). As the districts urbanize, supply within these areas is expected to be added to the City's supply.

Kings River

FID obtains much of its surface water from the Kings River.[28] The City has access to a proportional share of the FID entitlement depending on the water deliveries in a particular year. The average delivery the City has received of its total allocation is just over 17,000 AFY. The City executed a new, firm water supply agreement with FID in 2019 that provides a surface water supply that does not fluctuate with the FID entitlement or allocation and will be available to the City on a consistent basis. This agreement provides for up to 7,000 AFY by 2045, beginning at 1,000 AF in 2020.

Central Valley Project Water Allocation: Friant Division

Water obtained from the CVP comes from the diversion and storage of water from the San Joaquin River behind Friant Dam. [29] The total available water on the San Joaquin River has been estimated at 2,200,000 AF. Of that, 800,000 AF have been designated as Class I supply. Class I supply is considered to be dependable in most years with shortages only in very dry years. Class II water is in excess of Class I and is therefore much less dependable. The agreement between the City and FID requires FID to make available to the City the proportional share of all surface water available to the FID, although it does not allow the City to directly receive FID's CVP supplies. Therefore, FID is required to make a like amount of Kings River (or any other surface) water available to the City for its proportional share of Class II CVP supplies. FID's Class II contract has received an average 13,577 AFY.

[27] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[28] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[29] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

Garfield Water District

GWD is located north of the City with a portion of the district in the City's SOI.[30] The GWD holds a Class I CVP contract for 3,500 AFY. With half of GWD within the City's SOI, an estimated 1,750 AFY is expected to be added to the City's supply upon development.

International Water District

IWD is located east of the City's SOI within the General Plan boundary.[31] The IWD holds a Class I CVP contract for 1,200 AFY. The City's General Plan designates a portion of the District's area as industrial and residential use. At build-out it is estimated that the entire 1,200 AFY supply will be added to the City's supply.

Surface Water Treatment

Surface water is treated before delivery to customers at the Surface Water Treatment Plant (SWTP).[32] In 2010, the SWTP produced 2.1 billion gallons (6,445 AF). A planned expansion of the SWTP was completed in 2014 to increase capacity to 22.5 million gallons per day (23,133 AFY). The capability of the plant, however, is limited by supply.

Water Banking Facilities

Two water banking facilities, the Waldron Banking Facilities and Boswell Groundwater Banking Facility, are located in central Fresno County.[33] The purpose of these facilities is to bank surplus water supplies, thereby making it available to the City as needed. Excess that is not withdrawn from the aquifer will restore groundwater levels in the region. Under an agreement with the FID, the City is entitled to receive up to ninety percent (9,000 AF) of the annual yield of the Waldron Banking Facilities.[34] The City and FID have entered into a similar agreement regarding the Boswell Groundwater Banking Facility whereby the City will have access up to 4,500 AFY of surface water. In the event the Facility cannot produce the 4,500 AFY of surface water, FID will endeavor to acquire supplemental water for Clovis from other sources, which the City would be required to fund.

---

[30] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[31] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[32] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-17-Utilities-and-Service-Systems.pdf. Accessed March 2024.

[33] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-17-Utilities-and-Service-Systems.pdf. Accessed March 2024.

[34] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

RECYCLED WATER SUPPLY

Recycled water is currently used for irrigation of public and private landscape within the City's service area. In 2020, 574 AF of recycled water was used to irrigate landscape and 136 AF was used for agricultural irrigation.[35] Current areas receiving recycled water include Freeway 168 between Shepherd Avenue and Sierra Avenue, Clovis Community Medical Center, and multiple City parks and landscape areas.

Landscape irrigation will continue to be the main use of recycled water in the future for the City. All public landscape areas within three-quarters of a mile of the distribution system are considered potential recycled water use areas. Clovis Unified School District is evaluating the use of recycled water for its landscape areas. Caltrans has expanded their use of recycled water along Freeway 168 from Armstrong Avenue west to Sierra Avenue. This increase in volume and expansion of uses is expected to increase due to proactive actions taken by the City, which are described in a subsequent section. The City is very interested in exploring the use of recycled water for groundwater recharge. The water could be provided to recharge facilities during periods when no raw water supplies are available or to supplement raw water supplies.

Recycled water produced by the tertiary treatment plant is used for agricultural purposes when excess water is available. The City currently has a farmer adjacent to the ST-WRF that uses surplus recycled water to irrigate agricultural crops. The crops to be irrigated include almonds, citrus, and alfalfa. Farmers in the International Water District area are also interested in utilizing the water to irrigate crops which mainly are citrus. Currently, this area is not in the City's service area. Excess recycled water supplies are currently discharged to Fancher Creek and conveyed through irrigation canals to agricultural lands southwest of Clovis, or to the Little Dry Creek Diversion channel.

There are currently no wildlife habitat areas or wetlands within the Clovis service area. Potentially, the water discharged to FID could be used for wetlands or wildlife habitat enhancement areas.

The City of Clovis Recycled Water Master Plan reflects future recycled water mains throughout the Project. The Vista Ranch Project intends to use recycled water for public landscape and irrigation.

Clovis Sewer Treatment - Water Reuse Facility

The City's ST-WRF produces tertiary treated effluent that can be used for a variety of applications but is primarily used either as agriculture or landscape irrigation, with the remaining being discharged to nearby creeks.[36] The ST-WRF treats and produces up to 2.8 mgd of recycled water.

[35] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[36] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

The City intends to continue to expand the beneficial users of the recycled water supply and show the volumes in the water supply portfolio.

Regional Wastewater Treatment Plant - Water Reuse

A portion of the City's wastewater is treated at the RWRF.[37] This amount varies year to year but has averaged approximately 6,100 AFY over the past five years. City of Clovis flows are treated to secondary levels and then discharged to percolation ponds. The percolated effluent is then extracted from the groundwater aquifer through a series of reclamation wells, which the City of Clovis has participated in the construction and annual operations and maintenance through their shared capacity ownership with the City of Fresno. The reclaimed water is considered tertiary effluent and available for reuse, and the City of Clovis intends to use this water to offset groundwater pumping.

Additionally, under an agreement with the FID, the City of Fresno receives approximately one AF of surface water from the Kings River for each two AF of reclaimed water produced by the RWRF. Clovis will be discussing with Fresno the ability to receive a percentage of the exchange; however, the exchange is not being utilized at this time and has not been included in future water projections for the 2020 UWMP. This water is limited by agreement to being used for groundwater recharge activities.

Water Demand and Supply

HISTORICAL GROUNDWATER PUMPING

The City has historically relied on groundwater pumped from the Kings Subbasin, which was the City's sole source of drinking water until 2004, when the City began utilizing surface water with the goal of reducing groundwater extraction.[38] As described in Section 3.9, Hydrology and Water Quality, the Kings Subbasin is not adjudicated,[39] meaning the groundwater rights within the subbasin have not been determined by a court. Additionally, the Kings Subbasin is designated as a high-priority basin by the California Department of Water Resources (DWR) and is considered critically overdrafted.[40] In 2020, groundwater provided approximately 49 percent of the total potable water

[37] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[38] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[39] Provost & Pritchard, North Kings Groundwater Sustainability Agency Groundwater Sustainability Plan. Adopted November 2019 (Revised June 2022). Available at: https://northkingsgsa.org/groundwater-sustainability-plan/. Accessed February 2024.

[40] California Department of Water Resources, SGMA Basin Prioritization Dashboard. Available at: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed February 2024.

use.[41] The historical volume of groundwater pumped by the City over the past five years is provided in Table 3.14-1. The groundwater extraction has reduced since 2016 and is expected to continue to be reduced.

TABLE 3.14-1: HISTORICAL GROUNDWATER PRODUCTION (AFY)

	2016	*2017*	*2018*	*2019*	*2020*
Groundwater Supply	13,187	12,001	11,991	10,956	12,105

SOURCE: PROVOST & PRITCHARD CONSULTING GROUP, CITY OF CLOVIS URBAN WATER MANAGEMENT PLAN 2020 UPDATE; TABLE 6-2. JULY 2021.

EXISTING AND PROJECTED WATER DEMAND

This section describes and quantifies existing and projected water use within the City's water service area. Table 3.14-2 shows the City's existing and projected water demands for potable, raw, and other non-potable use within the water service area.[42] These demands represent the City's total water demand in the future, including recycled water. The 2020 data reflects actual 2020 water usage. Table 3.14-2 is completed for "normal" years when no drought conditions are present, water supplies are available in their expected quantities, and without additional restrictions put in place.

TABLE 3.14-2: EXISTING AND PROJECTED TOTAL WATER DEMAND IN NORMAL YEARS (AFY)

DEMAND USE	*2020*	*2025*	*2030*	*2035*	*2040*
Potable Water, Raw, Other Non-Potable	30,144	36,637	37,324	40,122	43,198
Recycled Water	710	3,100	5,500	6,300	9,400
Total Water Demand	30,854	39,737	42,824	46,422	52,598

SOURCE: PROVOST & PRITCHARD CONSULTING GROUP, CITY OF CLOVIS URBAN WATER MANAGEMENT PLAN 2020 UPDATE; TABLE 4.6. JULY 2021.

According to the 2020 UWMP, water use projections for 2025 through 2040 are based on a 2020 Water Use Target of 199 gallons per capita per day (gpcd) for all uses except single- and multi-family residential uses. In those instances, the Water Use Target has been reduced to 183 gpcd in 2025 and 167 gpcd in 2030 and beyond. The purpose of this reduction is to address the efficient indoor residential water use standards pursuant to Senate Bill (SB) 606 and Assembly Bill (AB) 1668.

The City currently has a water conservation program in place, as described in the City 2020 Water Shortage Contingency Plan (WSCP).[43] The City has six triggering levels which correspond to water

[41] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[42] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

[43] Provost & Pritchard Consulting Group, City of Clovis Water Shortage Contingency Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-WSCP-Adopted-July-2021_reduced.pdf. Accessed March 2024.

shortage levels. The water shortage levels are defined based on the percent reduction in available water supply when compared to a typical year. Each water shortage level has an accompanying goal for water consumption reduction varying from 10 percent to more than 50 percent.

As discussed in the City's 2020 UWMP, the reliability of the water system is reasonably robust; however, in a multiple dry year condition, the City will need to enact the WSCP to reduce demands.[44] Table 3.14-3 displays the normal, single-dry, and multiple dry year supply and demand comparisons. All years of the multiple dry year scenario utilize WSCP levels of conservation efforts. As shown in Table 3.14-3, the 2020 UWMP concludes that supplies are expected to meet demands in normal-, single dry-, and multiple dry-year conditions through 2040.

TABLE 3.14-3: PROJECTED FUTURE DRY YEAR POTABLE AND RAW WATER SUPPLY AND DEMAND (AFY)

HYDROLOGIC CONDITION		*2025*	*2030*	*2035*	*2040*
Normal Dry Year	Supply Totals	50,739	58,937	65,034	74,650
	Demand Totals	39,737	42,824	46,422	52,598
	Difference	*11,002*	*16,113*	*18,612*	*22,052*
Single Dry Year	Supply Totals	37,838	43,586	47,233	53,109
	Demand Totals	34,272	37,359	40,957	47,133
	Difference	*3,567*	*6,228*	*6,276*	*5,976*
Multiple Dry Year 1	Supply Totals	46,784	54,607	60,330	68,999
	Demand Totals	36,489	39,422	42,840	48,707
	Difference	*10,294*	*15,185*	*17,489*	*20,292*
Multiple Dry Year 2	Supply Totals	45,093	52,576	57,958	66,095
	Demand Totals	34,183	36,962	40,200	45,758
	Difference	*10,910*	*15,614*	*17,758*	*20,337*
Multiple Dry Year 3	Supply Totals	41,895	48,310	52,625	59,717
	Demand Totals	31,346	33,969	37,028	42,277
	Difference	*10,550*	*14,341*	*15,597*	*17,440*
Multiple Dry Year 4	Supply Totals	37,839	43,587	47,233	53,109
	Demand Totals	28,005	30,474	33,353	38,293
	Difference	*9,834*	*13,112*	*13,881*	*14,815*
Multiple Dry Year 5	Supply Totals	49,743	57,992	64,141	73,716
	Demand Totals	37,825	40,758	44,176	50,043
	Difference	*11,918*	*17,235*	*19,965*	*23,674*

SOURCE: PROVOST & PRITCHARD, CITY OF CLOVIS WATER SHORTAGE CONTINGENCY PLAN 2020 UPDATE; TABLES 7-3 AND 7-4. JULY 2021.

[44] Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

REGULATORY SETTING

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for Methyl Tertiary Butyl Ether (MTBE) and other oxygenates.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required to prepare and adopt an urban water management plan. An "urban water supplier" is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier's water demand management measures. The urban water supplier should make every effort to ensure the appropriate level of reliability in its water service is sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The DWR must receive a copy of an adopted urban water management plan.

Safe Drinking Water Act

The federal Safe Drinking Water Act, as passed in 1947 and amended in 1986 and 1996, is the Country's primary law regulating drinking water quality and is implemented by the United States Environmental Protection Agency (US EPA). The Safe Drinking Water Act authorizes the US EPA to set national health-based standards for drinking water and requires actions to protect drinking water and its sources. Additionally, it provides for treatment, monitoring, sampling, analytical methods, reporting, and public information requirements. Implementation of the Act, in California,

is under the jurisdiction of the California Department of Public Health (CDPH), Division of Drinking Water and Environmental Management. Drinking Water regulations are set forth in the California Code of Regulations (CCR), Titles 7 and 22.

Water Conservation Projects Act

California's requirements for water conservation are codified in the Water Conservation Projects Act of 1985 (Water Code Sections 11950 – 11954).

Consistent with California Water Code Sections 11950 – 11954, the City has implemented various water conservation efforts, as well as a Water Shortage Contingency Plan that identifies actions that can be taken to respond to catastrophic interruption of water supply.

Senate Bill 610

SB 610 was adopted in 2001 and reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. SB 610 amended the statutes of the Urban Water Management Planning Act, as well as the California Water Code Section 10910 et seq. The foundation document for compliance with SB 610 is the UWMP, which provides an important source of information for cities and counties as they update their general plans. Likewise, planning documents such as general plans and specific plans form the basis for the demand information contained in an UWMP, as well as a Water Supply Assessment (WSA) required under SB 610.

Water Code Section 10910 (c)(4) states "If the city or county is required to comply with this part pursuant to subdivision (b), the water assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed Project, in addition to existing and planned future uses, including agricultural and manufacturing uses."

Water supply planning under SB 610 requires reviewing and identifying adequate available water supplies necessary to meet the demand generated by a project, as well as the cumulative demand for the general region over the next 20 years, under a broad range of water conditions. This information is typically found in the current UWMP for the project area. SB 610 requires the identification of the public water supplier for a project.

In addition, SB 610 requires the preparation of a WSA if a project meets the definition of a "Project" under Water Code Section 10912 (a). The code defines a "Project" as meeting any of the following criteria:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;

- A commercial building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A hotel or motel with more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of these elements; or
- A project creating the equivalent demand of 500 residential units.

Alternately, if a public water system has less than 5,000 service connections, the definition of a "Project" includes any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of service connections for the public water system.

Based on the following, SB 610 applies to the proposed Project:

1. The proposed Project is subject to CEQA and an EIR is required.
2. The proposed Project, with up to 3,286 proposed residential dwelling units, meets the definition of a "Project" as specified in Water Code section 10912(a) paragraph (1) as defined for residential development.

The proposed Project has not been the subject of a previously adopted WSA and has not been included in an adopted WSA for a larger project. Thus, a WSA, as required by these criteria under SB 610, has been prepared for the Project. The WSA is included in Appendix K of this EIR.

Senate Bill (SB) 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a "sufficient water supply" exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

Executive Order B-37-16

In May 2016, Governor Edmund G. Brown, Junior, signed Executive Order B-37-16 (Executive Order), Making Water Conservation a California Way of Life. The Executive Order directed DWR to work with the SWRCB to develop new water use targets as part of a permanent conservation framework for urban water agencies. The targets will build upon requirements in the 2009 Water Conservation Act but will strengthen standards for indoor residential per capita water use, outdoor irrigation, commercial, industrial and institutional water use, and water lost through leaks. The SWRCB will consider a regulation that establishes unique efficiency goals for each Urban Retail Water Supplier in California and provides those suppliers flexibility to implement locally appropriate solutions. As part of the state's all-of-the-above strategy to expand storage, develop new water supplies, and promote more efficient water use, this regulation seeks to cultivate long-term practices that help communities adapt to California's ongoing water challenges. The proposed regulation will lessen the need for the emergency water use reduction targets that were important in recent droughts.

Senate Bill 606 and Assembly Bill 1668

Enacted in 2018, SB 606 and AB 1668 provide expanded and new authorities and requirements to enable permanent changes and actions for those purposes, improving the state's water future for generations to come. SB 606 and AB 1668 provides complementary authorities and requirements that affect water conservation and drought planning for urban water suppliers, agricultural water suppliers, small water suppliers, and rural communities.

City of Clovis General Plan

The City of Clovis General Plan includes several policies relevant to utilities, including wastewater. General Plan policies applicable to the Project are identified below:[45]

Land Use Element

- Policy 4.2: Surface water entitlements. The city should not approve annexation unless any and all surface water entitlements are retained; any and all surface water entitlements shall be transferred to the city upon development.

Public Facilities and Services Element

- Policy 1.1: New development. New development shall pay its fair share of public facility and infrastructure improvements.
- Policy 1.2: Water supply. Require that new development demonstrate contractual and actual sustainable water supplies adequate for the new development's demands.
- Policy 1.3: Annexation. Prior to annexation, the city must find that adequate water supply and service and wastewater treatment and disposal capacity can be provided for the proposed annexation. Existing water supplies must remain with the land and be transferred to the City upon annexation approval.

[45] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February 2024.

- Policy 1.4: Development-funded facilities. The City may require developments to install onsite or offsite facilities that are in excess of a development's fair share. However, the City shall establish a funding mechanism for future development to reimburse the original development for the amount in excess of the fair share costs.
- Policy 1.5: Recycled water. Use recycled water to reduce the demands for new water supplies. Support the expansion of recycled water infrastructure throughout Clovis and require new development to install recycled water infrastructure where feasible.
- Policy 1.6: Master plans. Periodically update water, recycled water, wastewater, and stormwater master plans and require all new development to be consistent with the current master plans.
- Policy 1.7: Groundwater. Stabilize groundwater levels by requiring that new development water demands not exceed the sustainable groundwater supply.
- Policy 1.8: Water facility protection. Protect existing and future water, wastewater, and recycled water facilities from encroachment by incompatible land uses that may be allowed through discretionary land use permits or changes in land use or zoning designations.

Open Space and Conservation Element

- Policy 3.5: Energy and water conservation. Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the California Building Code.

City of Clovis Municipal Code

Chapter 3.10, Development Impact Fees, of the City of Clovis Municipal Code establishes a uniform set of procedures applicable to AB 1600 development impact fees.

Chapter 6.5, Water System, pertains to the provision of water by the City. Article 1 of Chapter 6.5 deals with service rates and regulations; Article 2 discusses main extensions, connections, and frontage chargers; Article 3 regulates meters, main connections, and laterals; Article 4 establishes rules for heat transfer systems utilizing water; and Article 5 establishes water efficient landscape requirements.

Chapter 6.6, Wells, regulates well drilling, prohibited acts, permits required, use requirements, recharge charges, and the use of drainage wells.

Chapter 8.6, Plumbing Code, of the City's Municipal Code adopts the California Plumbing Code and includes specific amendments.

Clovis Water Master Plan Update Phase III (2017)

The primary purpose of the Water Master Plan (WMP) is to examine the feasibility of continued growth in the greater Clovis area from a water resource stand-point and develop a plan for implementation of facilities as well as development of a plan for acquisition of water supplies as the City continues to grow in an easterly direction with more limited groundwater supplies.

This report represents an update of the Phase 1 and 2 reports that were prepared in 1995 and 1999 respectively, that provided a blueprint for the future development of the city's water system. This

report documents the past years' efforts in evaluating the existing system and developing the future plan for the system.

Clovis Wastewater Master Plan (2017)

The Clovis Wastewater Master Plan Update, Phase 3 was adopted in 2017. The wastewater master plan update process consisted generally of developing design criteria, defining wastewater service areas, developing wastewater flow projections, analyzing and designing collection system pipelines, and summarizing results. The Wastewater Master Plan Update, Phase 3, (2017 Master Plan) is the latest phase of an effort begun in 1995 to update the City's Wastewater Master Plan. The preceding phase, referred to as the Wastewater Master Plan Update, Phase 2, (2008 Master Plan) was documented in a final report dated June 30, 2008. Under the 2017 Master Plan, the core of the city is planned to discharge to regional trunk sewers and on to the Fresno-Clovis RWRF in southwest Fresno.

Clovis Recycled Water Master Plan (2017)

The City of Clovis released a Recycled Water Master Plan in 2017. This Plan demonstrates how the water systems in the City will accommodate future population growth. Due to the impact of a five-year drought throughout the state, the scarcity of water supplies has resulted in significant motivation to continue investment in the use of recycled water to meet water demands. The purpose of the Clovis Recycled Water Master Plan Update is to evaluate current recycled water use, identify additional market opportunities as defined in the adopted General Plan, and produce an implementation plan incorporating recycled water as a significant portion of the Clovis' water supply. The efficient use of surface water and groundwater resources is critical to maintaining sustainability of communities throughout the Central Valley. To help alleviate potable water demands placed on these supplies, recycled water is a key source of supply many communities, including Clovis, utilize to enhance management of local water resources.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on water utilities and service systems if it would:

- Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects; and/or
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

IMPACTS AND MITIGATION MEASURES

Impact 3.14-3: The proposed Project has the potential to require or result in the construction of new water treatment facilities or expansion of existing water facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Under Project conditions, the Master Plan area would be annexed to the City and would be served by a new connection to the City of Clovis potable and non-potable water distribution system. The proposed water system would be located within proposed public streets and public utilities easements and connected to existing City main lines. The City of Clovis provides water utility services to the City from three main water supply sources: groundwater pumped from the Kings Subbasin; surface water delivered to the City by the FID; and recycled water from the ST-WRF and RWRF. Potable and non-potable water system improvements required under the Project are described below.

POTABLE WATER SYSTEM

The Master Plan would be served by a new potable water distribution system. Future phases of the Project would require new water supply infrastructure that would extend beyond the proposed Project boundaries. The precise nature and size of these improvements has not yet been determined; however, it is anticipated that these extended water infrastructure improvements be within existing rights-of-way along adjacent roadways or public utility easements and connected to existing City main lines. The proposed water distribution system would comply with City Master Plans and standards and would have at least two points of connection to existing City mains. These future improvements would likely extend from the northern Project boundary to the west along Behymer Avenue until approximately 770 feet west of Sunnyside Avenue, as well as along Perrin Road, extending west until approximately Burgan Avenue, with the development of Vista Ranch northwest of the Big Dry Creek Outlet Channel.

NON-POTABLE WATER SYSTEM

The Master Plan would include the development of an on-site non-potable water distribution system that would eventually provide irrigation water to planned parks, open space, and landscaped areas.

CONCLUSION

The proposed Project would provide adequate potable and non-potable water distribution systems in strict accordance with City Master Plans and standards. Furthermore, the construction of the new water facilities, which are associated with future buildout of the proposed Project, has the potential to cause environmental impacts. The potential for environmental impacts associated with the installation of the water system and all construction activities within the Development Area of the Project Site, are addressed throughout this EIR. Future off-site extensions of water infrastructure improvements would be limited to within existing rights-of way, and such future infrastructure extensions would therefore be undertaken after approval by the City and in compliance with all

applicable requirements. There are no other anticipated impacts associated with the infrastructure construction activities beyond what is already discussed throughout this EIR. Therefore, implementation of the proposed Project would have a ***less than significant*** impact relative to this topic.

Impact 3.14-4: The proposed Project does not have the potential to have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. (Less than Significant)

Under Project conditions, the Master Plan area would be annexed to the City and would be served by a new connection to the City of Clovis potable and non-potable water distribution system. The proposed water system would be located within proposed public streets and public utilities easements and connected to existing City main lines. The City of Clovis provides water utility services to the City from three main water supply sources: groundwater pumped from the Kings Subbasin; surface water delivered to the City by the FID; and recycled water from the ST-WRF and RWRF.

BACKGROUND

As discussed in Chapter 2.0, Project Description, the Project site includes several distinct planning boundaries. The Project Area comprises the Master Plan and the Non-Development Area. The City's long-range water planning documents, including the Phase III WMP and the 2020 UWMP, include a portion of the Project Area in their respective analyses, but do not include the entire Project Area. As such, the WSA prepared for the proposed Project calculates the difference between planned and proposed water demands in order to determine potential impacts to the City's water supply portfolio. A summary of the areas analyzed in the WSA and their relation to the WMP and UWMP is reproduced below:

- **Master Plan**. Approximately 410.6-acres of this area was included in the WMP and UWMP analyses, while approximately 98.9-acres of this area was included in the UWMP analysis but not the WMP analysis.

- **Non-Development Area**. Approximately 57.65-acres to the northeast of the Master Plan was not included in the City's UWMP analysis. Approximately 356.30-acres to the west of the Master Plan was included in the City's UWMP analysis.

PROJECTED WATER DEMAND FOR THE PROPOSED PROJECT

According to the WSA prepared for the proposed Project, to evaluate the overall water supply portfolio impact to the City's water supply portfolio, the additional water supply needed for the Project includes the demands associated areas not previously accounted for in the WMP plus the increased density above that which was accounted for in the WMP. Project impacts to the City's water supply portfolio documented in the WMP is shown in Table 3.14-4.

TABLE 3.14-4: PROJECT IMPACTS TO THE CITY'S WATER SUPPLY PORTFOLIO DOCUMENTED IN THE WMP

	INCREASED DENSITY WITHIN THE AREA SHOWN IN THE WMP	*AREAS OUTSIDE THE WMP*
Planned	962.4 AFY	0.0 AFY
Proposed	991.2 AFY	769.3 AFY
Difference	28.8 AFY	769.3 AFY
Total Impacts	**798.1 AFY**	

SOURCE: PROVOST & PRITCHARD CONSULTING GROUP, WATER SUPPLY ASSESSMENT, VISTA RANCH. MARCH 2024.
NOTES: WMP = WATER MASTER PLAN PHASE III (2017); AFY = ACRE-FEET PER YEAR.

According to the WSA prepared for the proposed Project, approximately 93 percent of the projected Project demand was included in the City's 2020 UWMP calculations. While only a portion of the demand of the entire Project Area was included in the UWMP, the calculations and analysis from the UWMP are utilized by the WSA as a current baseline for the City's supply and demand comparison. For purposes of understanding the difference between planned and proposed demands on a per capita basis, as documented in the UWMP, the WSA calculates the impact as shown in Table 3.14-5.

TABLE 3.14-5: PROJECT IMPACTS TO THE CITY'S WATER SUPPLY PORTFOLIO DOCUMENTED IN THE UWMP

	INCREASED DENSITY WITHIN THE AREA SHOWN IN THE UWMP
Planned	962.4 AFY
Proposed	991.2 AFY
Difference	28.8 AFY
Total Water Demands Not Previously Accounted For In UWMP	439.1 AFY

SOURCE: PROVOST & PRITCHARD CONSULTING GROUP, WATER SUPPLY ASSESSMENT, VISTA RANCH. MARCH 2024.
NOTES: UWMP = URBAN WATER MANAGEMENT PLAN 2020 UPDATE (2021); AFY = ACRE-FEET PER YEAR.

PROJECTED WATER SUPPLY FOR THE PROPOSED PROJECT

Water demands for the proposed Project will be served using the City's existing and future portfolio of water supplies. The inclusion of existing and planned future supplies is specifically allowed by the Water Code:

> *Water Code section 10631(b): Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).*

The applicants for the proposed Project will provide their proportionate share of required funding to the City for the acquisition and delivery of treated potable water supplies to the Project site.

DETERMINATION OF WATER SUPPLY SUFFICIENCY BASED ON THE REQUIREMENTS OF SB 610

Water Code section 10910 states:

> *10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.*

The WSA concludes that the City has adequate supplies to meet the needs of all the City's water customers, including the proposed Project, in normal water years, over the 20-year planning horizon. In the buildout year, if demand is as projected, the City will have sufficient water to meet dry year demands of all dry year types. Conservation measures, detailed in the Water Shortage Contingency Plan, have been developed that would mitigate possible shortfalls by reducing demand by approximately 15 percent. Evidence from the 2013 to 2015 drought suggests that those results, and more, are achievable. Additionally, as the City has surplus water supplies in normal years, short-term additional groundwater extraction in the single-dry and multiple-dry years is also planned as part of their water portfolio. Furthermore, the City has plans to continue to acquire water supplies and construct infrastructure to supply current and future water users. Therefore, the WSA concludes that the City of Clovis has adequate water supplies to meet the needs of the City in normal and multi-dry years.

Since the 2020 UWMP was adopted, four WSAs have been prepared for the City, including the WSA prepared for the Project. It is important to understand the cumulative impact of the additional demands associated with WSAs over and beyond the demands analyzed in the 2020 UWMP. Table 3.14-6 includes those demands noted in the UWMP, as well as the additional demands above the UWMP associated with the Project. Only the "additional demand" is noted in the table below, as the rest of the demand was already accounted for in the UWMP. Similarly, the noted Excess/Deficit reflects the difference between these summated demands and the total supply noted in the UWMP. This approach accounts for the additional demands associated with the proposed land use type above the demands associated with the originally planned land use type. Two conclusions can be made:

- Near-term: there is an excess of supply in all conditions, even with the additional demands imposed by the proposed Project.
- Long-term: the WMP evaluated the City's build-out of the General Plan based on assumed land use densities. The Project increases the density of those areas with calculated demands documented in the WMP and develops into an area without water demands associated with it in the WMP. The impact of those increases equates to an additional water supply needed for the Project of approximately 798 AFY.

TABLE 3.14-6: SUMMARY OF PROJECT WATER SUPPLIES AND DEMANDS

2020 UWMP SUPPLY AND DEMAND COMPARISON RESULTS	NORMAL DRY YEAR (2035)	SINGLE-DRY YEAR	MULTIPLE-DRY YEAR				
			YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Excess/<Deficit> in Supply	18,612	811	13,908	11,536	6,203	811	17,719
Excess/<Deficit> in Supply with Conservation	--	6,276	17,490	17,758	15,597	13,880	19,965
ADDITIONAL DEMANDS ASSOCIATED WITH WSAS PREPARED SINCE THE 2020 UWMP							
Home Place Master Plan (Approved March 2021)	No Additional Demand Associated with WSA						
Tract 6205 SOI Expansion (Approved 2024)	256	256	256	256	256	256	256
Tract 6343 (Approved 2024)	79	79	79	79	79	79	79
Vista Ranch SOI Expansion (Approval Anticipated by Fall 2024)	439	439	439	439	439	439	439
Excess/(Deficit) in Supply including Additional Demands from Approved WSAs	**17,838**	**37**	**13,134**	**10,762**	**5,429**	**37**	**16,945**
Excess/(Deficit) in Supply with Conservation including Additional Demands Approved WSAs[1]	**--**	**5,618**	**16,832**	**17,100**	**14,939**	**13,222**	**19,307**

SOURCE: PROVOST & PRITCHARD CONSULTING GROUP, WATER SUPPLY ASSESSMENT, VISTA RANCH. MARCH 2024.
NOTES: AFY = ACRE-FEET PER YEAR.
1. PER THE UWMP, CONSERVATION EFFORTS WILL REDUCE THE DEMANDS BY AN ESTIMATED 15%, WHICH IS REFLECTED IN THE VALUES IN THE TABLE.

CONCLUSION

The technical analyses shows that the total projected water supplies determined to be available for the proposed Project during Normal, Single-Dry, and Multiple-Dry years during a 20-year projection will meet the projected water demand associated with the proposed Project, in addition to existing and planned future uses. The proposed Project would not result in insufficient water supplies available to serve the Project from existing entitlements and resources. Therefore, the proposed Project would result in a ***less than significant*** impact to water supplies.

3.14.3 STORMWATER

ENVIRONMENTAL SETTING

The Project site is located within the service area of the Fresno Metropolitan Flood Control District (FMFCD).[46] The FMFCD provides flood control and urban storm water services in a 399-square mile watershed located between the Kings and San Joaquin Rivers.[47]

City Stormwater and Flood Control Facilities

The Fresno/Clovis urban area is served by a system of roughly 700 miles of pipeline and more than 150 stormwater retention basins.[48] FMFCD's stormwater drainage system consists of interconnected surface conveyances, storm drains, detention basins (stormwater basins), pump stations, and outfalls.[49] The stormwater basins discharge to groundwater, irrigation canals, creeks, and the San Joaquin River. The system is designed to retain and infiltrate as much runoff as possible into the underlying groundwater aquifer. On average, FMFCD's regional stormwater basin system captures 92 percent of annual rainfall, of which, 70 to 85 percent of the captured stormwater runoff is recharged into the local groundwater aquifer.[50] The stormwater basins also remove 50-80 percent of the typical stormwater pollutants.

The FMFCD system provides the primary means of urban storm drainage control for the City of Clovis and its sphere of influence. The FMFCD operates and maintains all master plan improvements, including the retention basins.[51] The City is responsible for operation and maintenance of all temporary facilities where master plan improvements are not complete. The City is also responsible for all surface flooding in streets and other areas where storm water cannot reach inlets and pipes quickly enough. The FMFCD Master Plan storm drainage pipeline system is designed to accept the peak flow rate of runoff from a two-year intensity storm event (a storm that has a 50 percent

[46] Fresno Metropolitan Flood Control District, Flood Control Program. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Flood-Control-Program-Fact-Sheet.pdf. Accessed February 2024.

[47] Fresno Metropolitan Flood Control District, About Fresno Metropolitan Flood Control District. Available at: https://www.fresnofloodcontrol.org/. Accessed February 2024.

[48] Fresno Metropolitan Flood Control District, About Fresno Metropolitan Flood Control District. Available at: https://www.fresnofloodcontrol.org/. Accessed February 2024.

[49] Fresno-Clovis Storm Water Quality Management Program. November 2013. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Stormwater-Quality-Management-Plan.pdf. Accessed February 2024.

[50] Fresno Metropolitan Flood Control District, Fresno-Clovis Storm Water Quality Management Program FY 2019-20 Annual Report. October 2020. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Fresno-Clovis-Storm-Water-Quality-Management-Program-2019-2020-Annual-Report.pdf. Accessed February 2024.

[51] City of Clovis, 2014 Master Service Plan Update. 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2014-Master-Service-Plan.pdf. Accessed February 2024.

probability of occurring in any given year).[52] When storm events occur that exceed the two-year intensity, ponding begins to occur in the streets until the pipeline system can remove the water. If the storm is of sufficient intensity to generate more water than the street can store, the water will continue to rise until it reaches a topographic outlet where it can escape down gradient. This escape route is a feature of the major storm routing system, implemented in 1998, that protects properties from damage in rainfall or runoff events that exceed system design capacities.

Most of the Project site is located within Drainage Areas BY1 (western portion of Project site) and BX (eastern portion of Project site); a small portion of the Project site, located in the southern portion near East Shepherd Avenue, is located within Drainage Area BT.[53]

Flood protection in the City of Clovis is afforded by Big Dry Creek Dam on Dry Creek, located approximately 3.5 miles upstream of the City.[54] The dam's main purpose is flood control, and it has a storage capacity of 30,200 AF. The Big Dry Creek Dam impounds stormwater runoff from Big Dry Creek in the Big Dry Creek Reservoir, which is owned and operated by the FMFCD. The Big Dry Creek Dam provides 230-year flood level of protection.

REGULATORY SETTING

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Pursuant to CWA Section 401 (Title 33, United States Code, Section 1341), applicants for a federal license or permit for activities which may discharge to waters of the United States must seek water quality certification from the state with jurisdiction. Such certification is based on a finding that the discharge will meet water quality standards and other applicable requirements. In California, each RWQCB issues or denies certification for discharges within their geographical jurisdiction.

The SWRCB and RWQCBs enforce State statutes that are equivalent to or more stringent than the federal statutes. RWQCBs are responsible for establishing water quality standards and objectives that protect the beneficial uses of various waters including the San Joaquin River, and other waters in the surrounding area. The RWQCB is responsible for protecting surface and groundwater from both point and non-point sources of pollution. Water quality objectives for all of the water bodies within the City were established by the RWQCB and are listed in its Basin Plan.

[52] Fresno Metropolitan Flood Control District, Annual Budget Fiscal Year Ending June 30, 2023. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/2022-2023-Annual-Budget.pdf. Accessed February 2024.

[53] Fresno Metropolitan Flood Control District, Fresno Metropolitan Flood Control District Map. Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=5ac65186b1794949a1fda62ca7734986. Accessed February 2024.

[54] Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

National Pollutant Discharge Elimination System

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (Title 33, United States Code, Section 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the EPA. The terms of these NPDES permits implement pertinent provisions of the CWA and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the CWA's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

Federal Emergency Management Agency

Fresno County is a participant in the National Flood Insurance Program (NFIP), a federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the DWR to insure the proper implementation of FEMA floodplain management regulations.

Department of Water Resources

The Department of Water Resources' (DWR) major responsibilities include preparing and updating the California Water Plan to guide development and management of the State's water resources, planning, designing, constructing, operating, and maintaining the State Water Resources Development System, protecting and restoring the Sacramento-San Joaquin Delta, regulating dams, providing flood protection, assisting in emergency management to safeguard life and property,

educating the public, and serving local water needs by providing technical assistance. In addition, the DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the federal CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Section 13260 of the Water Code requires all dischargers of waste that may affect water quality in waters of the state to prepare and provide a water quality discharge report to the RWQCB.

Fresno-Clovis Storm Water Quality Management Program

The Fresno-Clovis Storm Water Quality Management Program (SWQMP) was developed pursuant to Order No. R5-2013-0080 (issued by the Central Valley RWQCB in 2013).[55] The municipal NPDES stormwater permit (MS4 Permit) was issued to the FMFCD, the Cities of Fresno and Clovis, the County of Fresno, and the California State University at Fresno by the Central Valley RWQCB on May 31, 2013. The SWQMP includes specific pollution prevention and control practices for Fresno-Clovis urban drainage system planning, design, construction, and maintenance. It also includes public education to prevent stormwater pollution; specifies construction, industrial/commercial, municipal, and new development stormwater quality control practices; procedures to prevent and respond to illicit discharges and connections; monitoring to assess municipal stormwater impacts

[55] Fresno-Clovis Storm Water Quality Management Program. November 2013. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Stormwater-Quality-Management-Plan.pdf. Accessed February 2024.

on receiving waters; and program effectiveness assessments to evaluate the effectiveness of best management practices (BMPs).

To address the core program objectives and targeted stormwater pollutants and to ensure compliance with MS4 Permit requirements, the SWQMP incorporates a series of control measures, performance standards, and implementation schedules that provide for a long-term, comprehensive, and multidisciplinary effort by the Permittees to continue to achieve water quality standards and protect beneficial uses of the San Joaquin River, creeks and canals. The SWQMP "control measures" refer to activities intended to minimize, reduce, eliminate, or prohibit the discharge of pollutants with the goal of improving water quality. The benefits of these control measures are assessed through evaluation of associated performance standards. The performance standards include schedules and milestones for implementation.

Water Quality Control Plan for the Central Valley Region

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basin and Tulare Lake Basin (Basin Plans) include a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plans establish water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plans include an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of several national and statewide water quality plans and policies, including the California Water Code and the CWA.

State Water Resource Control Board (SWRCB) Stormwater Strategy

The Stormwater Strategy is founded on the results of the Stormwater Strategic Initiative, which served to direct the SWRCB's role in Stormwater resources management. The Stormwater Strategy developed guiding principles to serve as the foundation of the Stormwater program; identified issues that support or inhibit the program from aligning with the guiding principles; and proposed and prioritized projects that the Water Boards could implement to address those issues. The SWRCB staff created a strategy-based document called the Strategy to Optimize Management of Stormwater (STORMS). STORMS includes a program vision, missions, goals, objectives, projects,

timelines, and consideration of the most effective integration of project outcomes into the Water Board's Stormwater Program.

City of Clovis General Plan

The City of Clovis General Plan includes several policies relevant to stormwater. General Plan goals and policies applicable to the Project are identified below:[56]

Public Facilities and Services Element

- Policy 1.6: Master plans. Periodically update water, recycled water, wastewater, and stormwater master plans and require all new development to be consistent with the current master plans.

Environmental Safety Element

- Policy 1.1: Flood zone. Prohibit development within the 100-year flood zone and dam inundation areas unless adequate mitigation is provided against flood hazards. Participate in the National Flood Insurance Program.

Open Space and Conservation Element

- Policy 3.1: Stormwater management. Encourage the use of low impact development techniques that retain or mimic natural features for stormwater management.
- Policy 3.2: Stormwater pollution. Minimize the use of non-point source pollutants and stormwater runoff.

City of Clovis Municipal Code

Chapter 3.10, Development Impact Fees, of the City of Clovis Municipal Code establishes a uniform set of procedures applicable to AB 1600 development impact fees.

The City of Clovis Municipal Code Chapter 6.7 establishes the City's Urban Storm Water Quality Management and Discharge Control Ordinance. The purpose of the ordinance is to protect and enhance the water quality of watercourses and water bodies by reducing pollutants in urban storm water discharges to the maximum extent practicable and by effectively prohibiting non-storm water discharges to the storm drain system. The ordinance prohibits any discharge that could result in or contribute to a violation of the municipal NPDES storm water discharge permit. It requires Best Management Practices (BMPs) to control the volume, rate, and potential pollutant load of storm water runoff from new development and redevelopment projects.

[56] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February 2024.

Chapter 8.7, Planned Local Drainage Facilities and Improvements Development Requirements, Financing Mechanisms and Fees, requires payment of local drainage fees to fund construction of local drainage facilities and improvements.

Chapter 8.12, Floodplain Management, provides for floodplain management and regulates development in floodplains. A development permit must be obtained before construction or development within any area of special flood hazard. Permits require provisions for flood hazard reduction, including anchoring, flood-resistant materials, and construction methods to floodproof the structure.

Chapter 9.110 provides subdivision design and improvement requirements. Per Section 9.110.040, a grading plan is required to be submitted to and approved by the City Engineer prior to issuance of a subdivision-level building permit. Subdivisions are required to incorporate appropriate erosion and sediment control measures.

Chapter 9.28 contains landscaping standards and requires a landscape design plan, irrigation design plan, and soil analysis in order to reduce runoff and control soil erosion as part of the landscape documentation package.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on stormwater utilities and service systems if it would:

- Require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects.

IMPACTS AND MITIGATION MEASURES

Impact 3.14-5: The proposed Project has the potential to require or result in the construction of new stormwater drainage facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Stormwater runoff in the City of Clovis is conveyed through a system of street gutters, underground storm drains, retention/detention basins, pumping stations, and open channels that are maintained by the FMFCD. The FMFCD operates under the Fresno-Clovis SWQMP, which is assessed on an annual basis to demonstrate compliance with the municipal NPDES stormwater permit (MS4 Permit). The proposed Project would include construction of a new storm drainage system for the Master Plan area. The exact sizing of the underground piping would be engineered in coordination with FMFCD during the preparation of the improvement plans. The proposed storm drainage collection and detention system would be subject to the SWRCB requirements and City of Clovis regulations. This includes, but is not limited to, the municipal NPDES stormwater permit and the City of Clovis Urban Storm Water Quality Management and Discharge Control Ordinance, which would

require the implementation of BMPs to control the volume, rate, and potential pollutant load of storm water runoff.

The FMFCD charges a drainage fee that is calculated commensurate with each proposed development's lot coverage calculation. The Project would be required to pay this drainage fee, consistent with Chapter 8.7 of the City's Municipal Code. This calculation cannot be calculated for the Project at this time, given that building plans and lot specific landscaping and site improvements have not been prepared. This very detailed level of design would be performed at either the improvement plan or building plan phase to ensure funding for construction of appropriate local drainage facilities and improvements.

FMFCD reviews all grading and improvement plans for consistency with the FMFCD Storm Drainage and Flood Control Master Plan. This review ensures that grading does not have an adverse impact to major storm conveyance, and to the passage of storm water to the adjacent roadways and existing storm drainage pipelines and inlets. The initial review by FMFCD has indicated that the Project Development Area is located within the FMFCD's adopted Rural Master Plan Drainage Area BY1 and Urban Master Plan Drainage Area BX.[57] The adopted BY1 Rural Master Plan drainage system is designed to serve the existing land uses of open space, range/pasture and rural residential housing densities ranging from zero to 0.7 dwelling unit/acre. FMFCD has indicated that the existing BY1 planned drainage facilities do not have capacity to serve the proposed Mixed Use Village land use designation within the Project's Master Plan area. As such, FMFCD indicates that the Project would be required to either: make improvements to the existing pipeline system to provide additional capacity; or use some type of onsite permanent peak reducing facility in order to match the adopted Rural Master Plan flow rates and eliminate any adverse impacts on the downstream drainage system. In addition, for the portion of the Project proposed within the adopted BX Urban Master Plan, FMFCD has determined that the proposed land use under the Project is slightly higher than what was originally planned. As such, the existing drainage facilities located downstream may require changes such as parallel pipes and/or on-site retention to accommodate the increased flow. FMFCD requests that the grading Engineer contact the District as early as possible to review the proposed site grading for verification and acceptance of design prior to preparing a grading plan for the Development Area.

The Project would include construction of a new storm drainage system to serve the Master Plan area, which would be required to conform to applicable regulations, standards, and specifications of the SWRCB, the FMFCD, and the City of Clovis. This includes, but is not limited to, the municipal NPDES stormwater permit and the City of Clovis Urban Storm Water Quality Management and Discharge Control Ordinance, which would require the implementation of BMPs to control the volume, rate, and potential pollutant load of storm water runoff. With the design, construction, and maintenance of stormwater improvements in accordance with these requirements, the Project would not substantially increase the rate or amount of surface runoff that would exceed the capacity

[57] Fresno Metropolitan Flood Control District, Fresno Metropolitan Flood Control District Comments for Notice of Preparation of an Environmental Impact Report for Vista Ranch Project. November 17, 2023.

of the existing or proposed stormwater drainage system. Implementation of the proposed stormwater drainage improvements and compliance with existing regulations, standards, and specifications would reduce impacts associated with the relocation or construction of new or expanded stormwater facilities to a level that is ***less than significant***.

3.14.4 SOLID WASTE

ENVIRONMENTAL SETTING

The Project site is located directly north of the City of Clovis limit line in unincorporated Fresno County. The Project site is bounded on the north by East Behymer Avenue, on the east by the Big Dry Creek Reservoir, on the south by East Shepherd and East Perrin Avenues, and on the west by North Fowler and North Sunnyside Avenues. The Development Area consists of a combination of fallow and grazing land, several rural residences, offices and a yard for Landscape Connection and a small tree nursery. The Non-Development Area contains existing rural residential uses and agricultural fields.

Solid waste collection services within the Project site are currently provided under contract by Western Solid Waste and Republic Services.[58] Solid waste in the City of Clovis is collected by the City Public Utilities Department.[59] Recycling and greenwaste collection in the City is provided under contract by Republic Services.

Waste Disposal Facilities

In 2022, the majority (68 percent) of waste (69,702 tons) from the City went to the City of Clovis Landfill.[60] Other facilities that received relatively large amounts of waste from the City in 2022 include the Fairmead Solid Waste Disposal Site (14 percent, or 14,065 tons); American Avenue Disposal Site (10 percent, or 10,334 tons); and Avenal Regional Landfill (seven percent, or 7,186 tons). A number of other landfills received a relatively small amount of waste from the City in 2022, including the Billy Wright Landfill (335 tons); Chemical Waste Management, Inc. (103 tons); Visalia Landfill (39 tons); Recology Ostrom Road (one ton); Foothill Sanitary Landfill (0.31 ton); Recology Hay Road (0.17 ton); Forward Landfill (0.15 ton); and North County Recycling Center and Sanitary Landfill (0.03 ton). In addition, 1.34 tons were disposed of at the Covanta Stanislaus transformation facility. The largest landfills serving the City are discussed in detail below.

CITY OF CLOVIS LANDFILL

The City of Clovis Landfill is a Class III solid waste landfill located at 15679 Auberry Road in Clovis. The property spans approximately 210 acres, with approximately 76 acres allocated for waste

[58] County of Fresno, ESAP Waste Haulers. Available at: https://gisportal.co.fresno.ca.us/portal/apps/webappviewer/index.html?id=9eb6f60acbce4565a634a931a9cc6f42. Accessed February 2024.

[59] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-17-Utilities-and-Service-Systems.pdf. Accessed February 2024.

[60] California Department of Resources Recycling and Recovery (CalRecycle), RDRS Report 2: Jurisdiction Disposal and Beneficial Reuse by Destination. Available at: https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial. Accessed February 2024.

disposal.[61] The Clovis Landfill has a daily permitted maximum of 2,000 tons per day (TPD) and a remaining capacity of 7.7 million cubic yards as of 2012. The landfill has enough projected capacity to serve residents and businesses until approximately 2047.

FAIRMEAD SOLID WASTE DISPOSAL SITE

The Fairmead Solid Waste Disposal Site is a Class III solid waste landfill located in Madera County. The property spans approximately 121 acres, with approximately 77 acres allocated for waste disposal.[62] The Fairmead Solid Waste Disposal Site has a daily permitted maximum of 1,100 tons per day (TPD) and a remaining capacity of 5.6 million cubic yards as of 2004. The landfill has enough projected capacity to serve residents and businesses until approximately 2028.

AMERICAN AVENUE DISPOSAL SITE

The American Avenue Disposal Site is a Class III solid waste landfill located southwest of Kerman in Fresno County. The property spans approximately 440 acres, with approximately 361 acres allocated for waste disposal.[63] The American Avenue Disposal Site has a daily permitted maximum of 2,200 TPD and a remaining capacity of 29.4 million cubic yards as of 2005. The landfill has enough projected capacity to serve residents and businesses until approximately 2031.

AVENAL REGIONAL LANDFILL

The Avenal Regional Landfill is a Class III solid waste landfill located in the City of Avenal in Kings County. The property spans approximately 173 acres, with approximately 123 acres allocated for waste disposal.[64] The Avenal Regional Landfill has a daily permitted maximum of 6,000 TPD and a remaining capacity of 28.9 million cubic yards as of 2020. The landfill has enough projected capacity to serve residents and businesses until approximately 2056.

Solid Waste Generation Rates and Volumes

The California Integrated Waste Management Act of 1989 (AB 939), requires each city or county's source reduction and recycling element to include an implementation schedule showing that a city or county must divert 50 percent of solid waste from landfill disposal or transformation on and after January 1, 2000. SB 1016, passed in 2008, required the 50 percent diversion requirement to be

[61] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: City Of Clovis Landfill (10-AA-0004). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4529?siteID=347. Accessed February 2024.
[62] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: Fairmead Solid Waste Disposal Site (20-AA-0002). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3028?siteID=1701. Accessed February 2024.
[63] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: American Avenue Disposal Site (10-AA-0009). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4535?siteID=352. Accessed February 2024.
[64] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: American Avenue Disposal Site (10-AA-0009). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4535?siteID=352. Accessed February 2024.

calculated in a per capita disposal rate equivalent. AB 341, passed in 2012, requires that California increase its diversion rate to 75 percent by 2020.

The California Department of Resources Recycling and Recovery (CalRecycle) tracks and monitors solid waste generation rates on a per capita basis. Per capita solid waste generation rates and total annual solid waste disposal volumes for the City of Clovis between 2007 and 2022 are shown in Table 3.14-7. As shown, the per capita waste generation rate has ranged from 3.0 to 4.4 since 2007. The total annual disposal tonnage in Clovis increased by approximately 33,117 tons since 2007. With the passage of SB 1016, per capita disposal rate is used to determine the diversion progress of a city and not the jurisdictional diversion rates. Therefore, a population increase resulting in the generation of more overall city waste does not affect the jurisdiction's ability to meet its waste goals.

TABLE 3.14-7: SOLID WASTE GENERATION RATES

YEAR	WASTE GENERATION RATE (POUNDS/PERSON/DAY)		TOTAL DISPOSAL TONNAGE (TONS/YEAR)
	PER RESIDENT	PER EMPLOYEE	
2007	3.9	12.1	66,045.4
2008	3.1	9.8	52,913.3
2009	3.8	12.9	65,615.7
2010	4.1	15.8	71,202.7
2011	3.4	12.3	60,354.5
2012	3.3	12.3	60,132.2
2013	3.0	10.9	53,954.3
2014	3.2	10.4	59,098.7
2015	3.5	11.4	66,168.0
2016	3.7	12.1	73,642.7
2017	3.7	11.9	74,994.6
2018	3.9	12.9	80,919.6
2019	3.7	12.0	77,958.1
2020	4.0	13.2	86,067.3
2021	4.4	15.1	97,186.9
2022	4.4	14.2	99,222.7

SOURCE: CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE), JURISDICTION REVIEW REPORTS. AVAILABLE AT: HTTPS://WWW2.CALRECYCLE.CA.GOV/LGCENTRAL/ANNUALREPORTING/REVIEWREPORTS. ACCESSED FEBRUARY 2024.

The City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. As shown in Table 3.14-7, the City's per capita disposal rates have satisfied the target rate established by CalRecycle of 4.7 pounds/person/day for residents since 2010 and has satisfied the target rate of 15.5 pounds/person/day for employees since 2011.[65] The per

[65] California Department of Resources Recycling and Recovery (CalRecycle), Jurisdiction Review Reports. Available at: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed February 2024.

capita disposal rate is used as one of several factors that CalRecycle considers in determining a jurisdiction's compliance with the intent of AB 939. It allows CalRecycle and jurisdictions to focus on successful implementation of diversion programs. CalRecycle data also shows that the City has increased landfill diversion programs for solid waste, from 31 diversion programs in 2007 to 37 in 2022.[66]

REGULATORY SETTING

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. After several amendments, the current Act governs the management of solid and hazardous waste and underground storage tanks. RCRA was an amendment to the Solid Waste Disposal Act of 1965. RCRA has been amended several times, most significantly by the Hazardous and Solid Waste Amendments of 1984. RCRA is a combination of the first solid waste statutes and all subsequent amendments. RCRA authorizes the EPA to regulate waste management activities. RCRA authorizes states to develop and enforce their own waste management programs, in lieu of the federal program, if a state's waste management program is substantially equivalent to, consistent with, and no less stringent than the federal program.

California Integrated Waste Management Act (AB 939 and SB 1322)

The California Integrated Waste Management Act of 1989 (AB 939 and SB 1322) requires every city and county in the State to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25 percent by 1995 and 50 percent by 2000. The purpose of AB 939 and SB 1322 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." The term "integrated waste management" refers to the use of a variety of waste management practices to handle the municipal solid waste stream safely and effectively with the least adverse impact on human health and the environment. The Act has established a waste management hierarchy, as follows: Source Reduction; Recycling; Composting; Transformation; and Disposal.

California Integrated Waste Management Board Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a "model ordinance" relating to adequate

[66] California Department of Resources Recycling and Recovery (CalRecycle), Jurisdiction Review Reports. Available at: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed February 2024.

areas for collecting and loading recyclable materials in development projects. The model ordinance requires that any new development project, for which an application is submitted on or after September 1, 1994, include "adequate, accessible, and convenient areas for collecting and loading recyclable materials." For subdivisions of single-family detached homes, recycling areas are required to serve only the needs of the homes within that subdivision.

California Green Building Standards Code (CALGreen)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects.

California Mandatory Commercial Recycling Law (AB 341)

AB 341 directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The final regulation was approved by the Office of Administrative Law on May 7, 2012. The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California.

Beginning on July 1, 2012, businesses have been required to recycle, and each jurisdiction has implemented programs that include education, outreach, and monitoring. Jurisdictions were required to start reporting on their 2012 Electronic Annual Report (due August 1, 2013) on their initial education, outreach, and monitoring efforts, and, if applicable, on any enforcement activities or exemptions implemented by the jurisdiction.

In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020. This is not written as a 75 percent diversion mandate for each jurisdiction. The 50 percent disposal reduction mandate still stands for cities, counties, and State agencies (including community colleges) under AB 939. CalRecycle continues to evaluate program implementation as it has in the past through the Annual Report review process for entities subject to either AB 939.

Assembly Bill 1826 Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (please note, however, that multi-family dwellings are not required to have a food waste diversion program). Organic waste (also referred to as organics) means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste

generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Starting on January 1, 2019, businesses that generate four cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services. If CalRecycle determines that the statewide disposal of organic waste in 2020 has not been reduced by 50 percent of the level of disposal during 2014, the organic recycling requirements on businesses will expand to cover businesses that generate two cubic yards or more of commercial solid waste per week. Additionally, certain exemptions may no longer be available if this target is not met.

SB 1374 (Construction and Demolition Waste Materials Diversion)

SB 1374, Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the CIWMB to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

AB 2176 (Montanez, Chapter 879, Statues of 2004)

This law requires the largest venue facilities and events (as defined) in each city and county to plan and implement solid waste diversion programs, and annually report the progress of those upon the request of their local government. In turn, local jurisdictions must report to the CIWMB waste diversion information for the top 10 percent of venues and events by waste generation.

A large event is defined as:

1. Serves an average of more than 2,000 individuals per day of operation (both people attending the event and those working at it—including volunteers—are included in this number); and

2. Charges an admission price or is run by a local agency.

The bill specifically includes public, nonprofit, or privately owned parks, parking lots, golf courses, street systems, or other open space when being used for an event, including, but not limited to, a sporting event or a flea market in addition to events that meet both of the above.

A large venue is defined as:

- A permanent facility that annually seats or serves an average of more than 2,000 individuals within the grounds of the facility per day of operation (both people attending the event and those working at it—including volunteers too—are included in this number).

Venues include, but are not limited to airports, amphitheaters, amusement parks, aquariums, arenas, conference or civic centers, fairgrounds, museums, halls, horse tracks, performing arts centers, racetracks, stadiums, theaters, zoos, and other public attraction facilities.

Senate Bill 1383 Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions

In September 2016, Governor Brown signed SB 1383, establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) in various sectors of California's economy. The bill codifies the California Air Resources Board's Short-Lived Climate Pollutant Reduction Strategy, established pursuant to SB 605, in order to achieve reductions in the statewide emissions of short-lived climate pollutants. Actions to reduce short-lived climate pollutants are essential to address the many impacts of climate change on human health, especially in California's most at-risk communities, and on the environment.

As it pertains to solid waste, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

City of Clovis General Plan

The City of Clovis General Plan includes several policies relevant to solid waste. General Plan policies applicable to the Project are identified below:[67]

Community Facilities Element

- Policy 2.1: Minimize landfill disposal of solid waste. Promote solid waste source reduction, reuse, and recycling; composting; and the environmentally-safe transformation of wastes.
- Policy 2.2: Waste diversion rate. Meet the state's current and future waste diversion goals through the city's recycling and diversion programs.
- Policy 2.3: Expanded recycling. Increase recycling by commercial, industrial, and multifamily generators.
- Policy 2.4: Green and household hazardous materials waste. Encourage citywide participation in green waste reduction and household hazardous waste disposal programs.
- Policy 2.5: Clovis landfill. Maintain at least 15 years of ongoing landfill capacity.
- Policy 2.6: Solid waste facility encroachment. Protect existing or planned solid waste facilities from encroachment by incompatible land uses that may be allowed through discretionary land use permits or changes in land use or zoning designations.

City of Clovis Municipal Code

The City establishes regulations for solid waste collection through Chapter 6.3, Garbage and Rubbish, of the Municipal Code.[68] Chapter 6.3 allows the City monitor and regulate all garbage,

[67] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February 2024.

[68] City of Clovis Municipal Code, Chapter 6.3, Garbage and Rubbish. Available at: https://www.codepublishing.com/CA/Clovis/#!/Clovis06/Clovis06.html. Accessed February 2024.

rubbish, greenwaste, and recyclables, the containers the materials are collected in, and the collection process itself. The chapter establishes collection and collection points (Chapter 6.3.06) and collection rates (Chapter 6.3.08). Chapter 6.3.1, Recycling and Diversion of Construction and Demolition Debris, includes regulations related to waste diversion for debris from construction, demolition, and renovation of buildings. Chapter 6.3.2, Mandatory Organic Waste and Disposal Reduction Regulations, includes regulations related to recyclable materials and organic waste to achieve compliance with State law.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on solid waste service systems if it would:

- 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; and/or
- Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.14-6: The proposed Project has the potential to be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs and comply with federal, State, and local statutes and regulations related to solid waste. (Less than Significant)

New residential and non-residential land uses proposed in the Development Area of the Project site would increase the amount of solid waste generated when compared to existing conditions. Increased growth and development associated with Project implementation would result in an increase of solid waste disposal to transfer stations and landfills, and could contribute to an increased demand for solid waste services throughout the City. The Master Plan includes residential development of up to 3,286 units and may increase the City's population by approximately 9,333 residents (based on the Department of Finance estimates of 2.84 persons per household for 2023).[69] The City of Clovis achieved a disposal rate of 4.4 pounds per day per resident in 2022.[70] Assuming these disposal rates remain constant throughout the life of the Project, the Project would result in a net increase of approximately 40,198.4 pounds per day of solid waste over existing conditions, which equals 20.1 net tons per day or 7,336.5 net tons of solid waste per year. In addition, the

[69] California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023. May 2023. Available at: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. Accessed February 2024.

[70] California Department of Resources Recycling and Recovery (CalRecycle), Jurisdiction Review Reports. Available at: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed February 2024.

Project includes non-residential development, including a mixed-use neighborhood commercial center designed to provide localized retail and service uses and employment to the Project area and local surrounding areas, a mini storage site approved for development by the County of Fresno, an elementary school, and community recreation centers serving the community. While these uses would generate solid waste, solid waste generation associated by non-residential uses is anticipated to be insignificant in comparison to the proposed residential uses.

The Clovis Landfill has a remaining capacity of 7.7 million cubic yards as of 2012, is permitted a maximum throughput of 2,000 TPD, and has enough projected capacity to serve residents and businesses until approximately 2047.[71] Fairmead Solid Waste Disposal Site has a remaining capacity of 5.6 million cubic yards as of 2004, is permitted a maximum throughput of 1,100 TPD, and has enough projected capacity to serve residents and businesses until approximately 2028.[72] American Avenue Disposal Site has a remaining capacity of 29.4 million cubic yards as of 2005, is permitted a maximum throughput of 2,200 TPD, and has enough projected capacity to serve residents and businesses until approximately 2031.[73] Avenal Regional Landfill has a remaining capacity of 28.9 million cubic yards as of 2020, is permitted a maximum throughput of 6,000 TPD, and has enough projected capacity to serve residents and businesses until approximately 2056.[74] Conservatively assuming the Clovis Landfill reaches full capacity, the Fairmead Solid Waste Disposal Site, American Avenue Disposal Site, or Avenal Regional Landfill would have adequate capacity to accommodate the Project's projected solid waste generation. Further, it is more likely that future solid waste would be distributed to a number of landfills serving the City. Therefore, the City's projected increase in solid waste generation associated with future buildout of the proposed Project is expected to be within the permitted capacities of landfills utilized by the City.

All development within the City, including the Project, would be required to comply with waste reduction and recycling requirements, including Chapter 6.3 of the Clovis Municipal Code, that aim to reduce the amount of solid waste being diverted to the landfill. Clovis Municipal Code Chapter 6.3 establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939 and AB 341. The City and the City's contracted recycling and greenwaste collection service provider (i.e., Republic Services) work together to submit information to meet the reporting requirements of AB 939, or any other law or regulation, to reach the solid waste and recycling goals mandated by the AB 939. Through the implementation of existing regulations and compliance with

[71] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: City Of Clovis Landfill (10-AA-0004). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4529?siteID=347. Accessed February 2024.
[72] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: Fairmead Solid Waste Disposal Site (20-AA-0002). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3028?siteID=1701. Accessed February 2024.
[73] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: American Avenue Disposal Site (10-AA-0009). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4535?siteID=352. Accessed February 2024.
[74] California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: American Avenue Disposal Site (10-AA-0009). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4535?siteID=352. Accessed February 2024.

the Clovis General Plan and Municipal Code, the Project would comply with regulations related to solid waste and would not exceed the permitted capacity of the landfill serving the City. Additionally, based on the estimated closure dates of the landfills serving the City, development under the proposed Project would not result in a significant impact on landfill capacity. Therefore, the proposed Project would have a ***less than significant*** impact relative to this topic.

3.14.5 ENERGY & TELECOMMUNICATIONS

ENVIRONMENTAL SETTING

Electrical and natural gas service to the Project site is provided by Pacific Gas and Electric (PG&E).[75] Electrical service is supplied by underground and overhead lines routed through substations in the greater Clovis area. Gas service is provided to customers through plastic and steel underground lines. Residents not serviced by PG&E use propane fuel. Telecommunications and phone services are provided by a number telecommunications providers, including AT&T; cable services are provided by Comcast.

Except for MPArea 1, natural gas would not be provided under the Project. Internet services would be extended to all portions of the Master Plan area from existing facilities located along East Shepherd Avenue and from existing residential development surrounding the Master Plan area. Proposed utilities would be located within public utility easements to be dedicated along street frontages. Utility improvements would be installed in conjunction with planned street improvements.

REGULATORY SETTING

Federal Energy Regulation Commission

The Federal Energy Regulatory Commission duties include the regulation of the transmission and sale of electricity and natural gas in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters.

California Public Utilities Commission

Established in 1911, the California Public Utilities Commission regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The commission is organized into several advisory units, an enforcement division, and a strategic planning group.

California Electrical Code

The California Electrical Code is codified in Title 24, CCR, Part 3. The Electrical Code contains regulations including, but not limited to, electrical materials, electrical wiring, overcurrent protection, grounding, and installation.

[75] City of Clovis, 2014 Master Service Plan Update. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2014-Master-Service-Plan.pdf. Accessed February 2024.

City of Clovis General Plan

The City of Clovis General Plan includes several policies relevant to energy and telecommunications. General Plan policies applicable to the Project are identified below:[76]

Public Services & Utilities Element

- Policy 1.1: New Development. New development shall pay its fair share of public facility and infrastructure improvements.

Open Space & Conservation Element

- Policy 3.5: Energy and water conservation. Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the California Building Code.
- Policy 3.6: Renewable Energy. Promote the use of renewable and sustainable energy sources to serve public and private sector development.
- Policy 3.7: Construction and design. Encourage new construction to incorporate energy efficient building and site design strategies.

City of Clovis Municipal Code

Title 7 of the Clovis Municipal Code contains Chapter 7.3, Underground Utility Districts, and Chapter 7.5, Underground Wiring. Chapter 7.3 regulates underground utility districts for the purposes of public necessity, health, safety, and welfare. Chapter 7.5 states that all utility facilities (including, but not limited to, electrical, communication and cable television lines) located within the boundaries of a development project property or to be installed in and for the purpose of supplying service to any development project shall be placed underground; and that the developer shall be responsible for compliance with the provisions of this section. It shall be the responsibility of the developer to make the necessary arrangements with the serving utility owner for the installation of an underground system, owned and operated by the utility owner. The developer shall submit satisfactory evidence thereof prior to the acceptance and approval of the development project.

The City officially adopts the California Electrical Code, and subsequent amendments, in Chapter 8.2, Electrical Code.

Chapter 9.42, Wireless telecommunications facilities, provides regulations regarding the location and design of wireless communications facilities, and intends to ensure that the installation of wireless communication facilities will not be detrimental to the City's public health, safety, or welfare. The intention of the regulations is to treat wireless communications facilities, including

[76] City of Clovis, City of Clovis General Plan, Adopted August 25, 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed February 2024.

antennas, in the same way that other mechanical equipment (e.g., air conditioners) are treated, and to require proper screening and architectural compatibility.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on energy and telecommunications utilities and service systems if it would:

- Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

IMPACTS AND MITIGATION MEASURES

Impact 3.14-7: The proposed Project has the potential to require or result in the construction of new electrical, or telecommunications facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Electrical services to the Project site are provided by PG&E; telephone service is provided by AT&T; cable service is provided by Comcast; and related internet services would be would be extended to all portions of the Master Plan area from existing facilities located along East Shepherd Avenue and from existing residential development surrounding the Master Plan area. PG&E and AT&T operate and maintain transmission and distribution infrastructure in the Project area. Proposed utilities would be located within public utility easements to be dedicated along street frontages. Although the proposed Project would increase demand for electricity and telecommunications facilities, utility improvements would be installed in conjunction with planned street improvements. Although the Project would require construction of new electrical facilities within the site, these improvements would be limited to connections to existing facilities near the Project site. The potential environmental effects associated with construction and operation of the proposed Project, including the installation of the proposed electrical improvements in the roadway rights-of-way to serve the proposed development, are analyzed throughout this EIR under each environmental topical area. The proposed Project would not result in the relocation or construction of new or expanded electrical, and telecommunications facilities, the construction or relocation of which could cause significant environmental effects. This is a ***less than significant*** impact.

This Page Intentionally Left Blank.

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) be prepared to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a discussion of CEQA-mandated analysis for cumulative impacts, significant irreversible effects, and significant and unavoidable impacts associated with the proposed Project.

4.1 CUMULATIVE SETTING AND IMPACT ANALYSIS

INTRODUCTION

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed Project. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual 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 (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created because of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> *…the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,

(B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

CUMULATIVE SETTING

The cumulative setting uses growth projections listed in the City of Clovis Municipal Services Review (2019), and State of California Department of Finance population forecast statistics. Table 4.0-1 shows growth projections.

TABLE 4.0-1: GROWTH PROJECTIONS

CALENDAR YEAR	*ESTIMATED POPULATION (CLOVIS)*	*ESTIMATED POPULATION (FRESNO COUNTY)*	*ESTIMATED POPULATION (CALIFORNIA)*
2025	136,350	1,053,955	40,808,001
2030	145,050	1,096,638	41,860,549
2035	153,490	1,1235,837	42,718,403
2040	161,580	1,170,525	43,353,414

SOURCES: FRESNO LAFCO – CITY OF CLOVIS MUNICIPAL SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATE (2019), STATE OF CALIFORNIA DEPARTMENT OF FINANCE – POPULATION FORECAST PROJECTIONS (2020).

CUMULATIVE EFFECTS OF THE PROJECT

Cumulative settings are identified under each cumulative impact analysis. Cumulative settings vary because the area that the impact may affect is different. For example, noise impacts generally only impact the local surrounding area because noise travels a relatively short distance, while air quality impacts affect the whole air basin as wind currents control air flow and are not generally affected by natural or manmade barriers which would affect noise. Cumulative Project impacts are addressed and summarized below.

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (State CEQA Guidelines 15130[b]).

There are two approaches to identifying cumulative projects and the associated impacts. The list approach identifies individual projects known to be occurring or proposed in the surrounding area to identify potential cumulative impacts. The projection approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses the projection approach for the cumulative analysis and considers the development anticipated to occur upon buildout of the various General Plans in the area.

Project Assumptions

The proposed Project's contribution to environmental impacts under cumulative conditions is based on full buildout of the Project site. See Chapter 2.0, Project Description, for a complete description of the proposed Project.

Cumulative Impacts

Some cumulative impacts for issue areas are not quantifiable and are therefore discussed in general terms as they pertain to development patterns in the surrounding region. Exceptions to this are traffic, utilities, noise, and air quality (the latter two of which are associated with traffic volumes), which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. In consideration of the cumulative scenario described above, the proposed Project may result in the following cumulative impacts.

AESTHETICS AND VISUAL RESOURCES

The cumulative setting for aesthetics is the City of Clovis and surrounding areas of Fresno County.

Impact 4.1: Cumulative Degradation of the Existing Visual Character of the Region (Less than Significant and less than Cumulatively Considerable)

As described in Section 3.1, Aesthetics and Visual Resources, development of the proposed Project changes the visual character of the Project site, as it would convert the approximately 507-acre Master Plan area from its existing use, which consists of a combination of fallow and grazing land, several rural residences, offices for Contractor's Corp Yard and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described, as described in Section 3.1-1 of this EIR, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses. These impacts related to a change in visual character may be considered "attractive" to one viewer and "unattractive" to other viewers. It is noted that the Clovis General Plan EIR concluded that adoption of the General Plan, which contemplated urbanization of the agricultural lands within the General Plan study area, was a less than significant impact.[1]

[1] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

To reduce the visual impacts of the development, development within the Project site is required to be consistent with the General Plan and the Clovis Zoning Ordinance, which includes standards related to landscaping and screening. The proposed Project would be developed in accordance with all applicable Municipal Code provisions and requirements, as well as compliance with the Vista Ranch Master Development Plan, thereby ensuring that implementation of the proposed Project would not have a substantial adverse impact on scenic vistas, corridors, or resources in the City of Clovis.

The visual loss of rural land in the Master Plan area would result in a permanent change to the visual character of the Project site in perpetuity; however, compliance with General Plan policies, as well as the City Municipal Code and Vista Ranch Master Development Plan related to the design, construction, and maintenance of the Project, would be required. Clovis Municipal Code Title 9, Development Code Division 3, includes a series of Development and Operational Standards which are intended to minimize and mitigate the potential impacts of development within the City and promote compatibility with surrounding areas and land uses. These standards include requirements related to exterior light and glare (Section 9.22.050), fences, walls, and hedges (Section 9.24.060), height measurement and height limit exceptions (9.24.080), screening and buffering (Section 9.24.090), setback regulations and exceptions (Section 9.24.100), landscaping standards (Chapter 9.28), tree protection standards (Chapter 9.30), and signs (Chapter 9.34). Some of these standards and requirements from pre-existing regulations are implemented after Project entitlement, when more detailed site planning, engineering, and architecture is performed.

Under cumulative conditions, buildout of the General Plan for Clovis and the surrounding jurisdictions could result in changes to the visual character and quality of the City of Clovis through development of undeveloped areas and/or changes to the character of existing communities. Development of the proposed Project, in addition to other future projects in the area, would change the existing visual and scenic qualities of the City. However, the City of Clovis has adopted specific landscape and design standards to enhance the visual appearance of the Project site and adjacent areas. As such, this is a **less than significant** cumulative impact. As such, impacts relative to degradation of visual character would be a **less than cumulatively considerable contribution** and no mitigation is required.

Impact 4.2: Cumulative Damage to Scenic Resources within a State Scenic Highway (Less than Significant and Less than Cumulatively Considerable)

There are no designated State Scenic Highways in the vicinity of the Project site. No officially designated State scenic highways are in the City of Clovis. The nearest "eligible" State Scenic Highway to the City is SR 168, which is located over one mile to the south of the Project site at its closest point. Additionally, there are no "eligible" highway segments in the Project vicinity that may be included in the State Scenic Highway system. As such, this is a **less than significant** cumulative impact. As such, impacts relative to scenic resources would be a **less than cumulatively considerable contribution** and no mitigation is required.

Impact 4.3: Cumulative Impact on Light and Glare (Less than Significant and Less than Cumulatively Considerable)

The proposed Project would be required to implement existing City regulations aimed at reducing light and glare impacts to ensure that no unusual daytime glare or nighttime lighting is produced. Specifically, the Clovis Development Code states that direct glare shall not be permitted and provides standards for nuisance prevention and shielding requirements. Section 9.22.050 of the Clovis Development Code contains standards and provisions related to exterior lighting. While implementation of regulations and standards within the Clovis Development Code would reduce impacts associated with increased light and glare, the impacts would not be eliminated entirely, and the overall level of light and glare in the Project site would increase in general as urban development occurs.

Overall, the proposed Project would introduce new sources of daytime and nighttime lighting within the Project site that do not currently exist. However, it is noted there are no specific features within the proposed Project that would create unusual light and glare. Light sources from the proposed Project can have an adverse impact on the surrounding areas, by introducing nuisance light into the area and decreasing the visibility of nighttime skies. Additionally, light sources can create light spillover impacts on surrounding land uses in the absence of a lighting plan that includes photometrics of the lighting. Any new lighting associated with development of the proposed Project would be pedestrian-scale lighting and the fixtures would be consistent with the style and technical specifications approved by the City, including compliance with the City's light and glare regulations under Section 9.22.050 of the Clovis Development Code, which requires that light be shielded so that light does not spill onto adjacent properties. The City's existing requirements require a lighting plan to be submitted to the City for review and approval for the improvement plans, as well as for the building plans. All proposed outdoor lighting is required to meet applicable City standards regulating outdoor lighting, including 9.22.050 Exterior light and glare of the City's Development Code, to minimize any impacts resulting from outdoor lighting on adjacent properties. Implementation of the existing City standards would reduce potential impacts associated with nighttime lighting and light spillage onto adjacent properties to a less than significant level.

Future projects within Clovis and Fresno County would be subject to the light and glare standards established by the individual jurisdictions. These regulations are designed to minimize potential light and glare impacts of new development. Implementation of these regulations would ensure that future projects minimize their potential cumulative light and glare impacts resulting in a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to nighttime lighting and daytime glare would be a **less than cumulatively considerable contribution**.

AGRICULTURAL RESOURCES

The cumulative setting for agriculture and forest resources is all of Fresno County. According to the Department of Conservation, the total acreage of crop land in the county is approximately 1,355,142 acres. The gross value of agricultural production in Fresno County for 2022 was $8.096 billion.

Impact 4.4: Cumulative Impact on Agricultural Resources (Less than Significant and Less than Cumulatively Considerable)

There is one parcel within the Non-development area under a Williamson Act contract. This parcel is not anticipated for any development and no conflict would occur from project approval. There are two parcels within the Master Plan Area with an active Williamson Act contract. The parcels are located within Planning Area (PA) 29. These parcels total 34.17 acres and are part of MPArea 2, which is not anticipated for immediate development. MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan, but these areas would be required to have a project-level CEQA analysis when the property owners decide to develop the parcels. Immediate development would have the potential for a conflict because the Williamson Act contract is in effect, however, immediate development is not anticipated for the parcels under a Williamson Act. A Williamson Act contract is a voluntary agreement,' and the cancellation process is defined in *Williamson Act Cancellation Process, Guide for Local Governments* (California Department of Conservation 2022). The process can involve a filing of non-renewal and a lapse of the appropriate time, or a standard cancellation with a fee assessment.

Additionally, as described in Section 3.2, development of the proposed Project would result in the permanent conversion of approximately 476.24 acres of Farmland of Local Importance, as designated by the California Department of Conservation on the June 2020 Important Farmlands Map and as shown on Figure 3.2-1, to nonagricultural use. After looking at site-specific characteristics more closely for the Project site, it is noteworthy that the Department of Conservation's designations do not accurately and fully consider site specific characteristics such as the lack of any irrigation or crop production on the Project site. To reconcile these facts and analyze the site-specific characteristics more fully, the Clovis General Plan calls for the use of the Land Evaluation and Site Assessment (LESA) to evaluate the significance of the agricultural conversion. It is noted that the LESA model was developed by the Department of Conservation, which is the same agency that published the Important Farmland's Map.

The California LESA model was utilized to determine the proposed Project's potential impact on agricultural resources. The LESA scoring for the proposed Project is documented on the LESA scoring sheets in Appendix B. The proposed Project has a final LESA score of 40.44, which is a significant impact only if the Land Evaluation and Site Assessment sub scores are both greater than or equal to 20 points. The proposed Project has a sub score of 25.44 for the Land Evaluation and a sub score of 15 for the Site Assessment, which means the conversion of the land on the Project site is not considered significant according to the California Department of Conservation's established thresholds.

After evaluating the site-specific soil characteristics, project size, surrounding uses, agricultural protection zones, water resources availability, and ongoing economic feasibility of agricultural operations utilizing the LESA Model, it was determined that the conversion of the land on the Project site is not a significant impact. Therefore, implementation of the proposed Project would have a **less**

than significant impact relative to this topic and no mitigation is required. As such, impacts to agricultural resources would be a **less than cumulatively considerable contribution**.

AIR QUALITY

The cumulative setting for air quality impacts is the San Joaquin Valley Air Basin (SJVAB), which consists of eight counties, stretching from Kern County in the south to San Joaquin County in the north. The SJVAB is bounded by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi mountains in the south.

Impact 4.5: Cumulative Impact on the Region's Air Quality (Cumulatively Considerable and Significant and Unavoidable)

Under buildout conditions in Fresno County, the SJVAB would continue to experience increases in criteria pollutants and efforts to improve air quality throughout the basin would be hindered. As described in Section 3.3, Fresno County has a State designation Attainment or Unclassified for all criteria pollutants except for ozone, PM_{10} and $PM_{2.5}$. Fresno County has a national designation of either Unclassified or Attainment for all criteria pollutants except for Ozone and $PM_{2.5}$. Table 3.3-2 in Section 3.3 presents the state and national attainment status for Fresno County.

As discussed under Impact 3.3-1 in Section 3.3, the SJVAPCD has established their thresholds of significance by which the Project emissions are compared against to determine the level of significance. The SJVAPCD has established operations related emissions thresholds of significance as follows: 100 tons per year of carbon monoxide (CO), 10 tons per year of oxides of nitrogen (NO_x), 10 tons per year of reactive organic gases (ROG), 27 tons per year of sulfur oxides (SOx), 15 tons per year PM_{10}, and 15 tons per year $PM_{2.5}$.

As shown in Table 3.3-8, the unmitigated operational emissions would exceed the SJVACPD operational thresholds of significance for CO, NOx, ROG, and PM_{10}. Based on this, mitigation measures are required to be implemented to reduce CO, NOx, ROG, and PM_{10} emissions. With implementation of the available feasible mitigation measures (Mitigation Measures 3.3-1 through 3.3-3), the proposed Project's emissions would be reduced. As shown in Table 3.3-9, the proposed Project's operational criteria pollutant would exceed the applicable SJVAPCD thresholds of significance for CO, NOx, ROG, and PM_{10}, even after accounting for the mitigation measures that are quantifiable at this time. This would also be true even after implementation of pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements. The Project would be required to implement Mitigation Measure 3.3-1 through Mitigation Measure 3.3-4.

As shown in Table 3.3-11, Project maximum construction emissions is not expected to exceed the SJVAPCD thresholds of significance with the implementation of existing rules and regulations.

Even with implementation of the mitigation measures presented in Section 3.3, development of the proposed Project would have a **cumulatively considerable contribution** and **a significant and unavoidable** impact.

BIOLOGICAL RESOURCES

The cumulative setting for biological resources includes the Project site and surrounding east-central San Joaquin Valley region. Within this context, progressive development and extensive agricultural activity under County and City general plans has resulted in the following long-term cumulative impacts on biological and jurisdictional resources:

- loss and degradation of habitat, particularly habitat for special-status species
- loss and degradation of sensitive natural communities, such as riparian habitat
- modification, degradation, and loss of jurisdictional wetlands and other waters

All of these are considered to represent significant existing cumulative impacts at the regional or landscape level. Additional significant cumulative impacts are considered to exist at the species level where individual plant and wildlife species present in the region have been identified as qualifying for federal or state special status.

Progressive development in the east-central San Joaquin Valley has also arguably created a cumulative impact related to increased use of nighttime lighting and corollary light spill and glare effects. This is also considered a significant existing cumulative impact.

The followings analysis considers the proposed Project's potential to contribute to these existing cumulative impacts. It also addresses the potential for the Project to result in new significant cumulative impacts due to repeated activity during Project development and occupancy.

Impact 4.6: Contributions to Impacts on Special-Status Species and their Habitat (Less than Significant and Less than Cumulatively Considerable)

CONTRIBUTIONS OF MPAREA 1 DEVELOPMENT

As detailed in Section 3.4 (see Impact 3.4-1), development in MPArea 1 has the potential to result in the following impacts.

- Loss of special-status plant occurrences
- Direct injury/mortality and loss of habitat affecting the following special-status wildlife species
    - California tiger salamander
    - San Joaquin kit fox
    - Crotch's bumble bee
    - Vernal pool fairy shrimp, California linderiella, and possibly also mid-valley fairy shrimp
    - Western spadefoot
    - Western pond turtle

- Effects on nesting success and/or loss of foraging habitat for Swainson's Hawk and Cooper's Hawk

Impacts on special-status plants would be addressed by implementation of Mitigation Measure 3.4-1, which requires additional protocol-level special-status plant surveys prior to any construction occurring after 2025, when the current surveys (conducted in 2023) are considered to "age out". If future surveys document special-status plants in MPArea 1, they will be protected in place if possible, and transplanted to other suitable habitat if not, where they will be monitored and maintained over the long term to ensure survival. With this measure in place, impacts on special-status plants would be reduced consistent with current prevailing conservation practice and were evaluated as less than significant at the incremental (project-specific) level. Because impacts on special-status species are inherently a contribution to a significant cumulative impact, this same mitigation measure would also ensure that the contribution of MPArea 1 development to existing impacts on special-status plants is less than cumulatively considerable—adequately mitigating the project's incremental impact also mitigates its contribution to the larger cumulative impact. No additional mitigation is required at the cumulative level, and no further analysis is warranted.

Because of its overall disturbed condition and history of agricultural use, MPArea 1 offers only low-quality habitat for special-status plants known from the region. Consequently, the conversion of this area to developed uses is not expected to contribute substantially to regional loss of special-status plant habitat. Moreover, as discussed in more detail in Section 3.4, the MPArea 1 applicant is committed to preserving a large tract of conservation lands about 15 miles northwest of the project site as compensation for losses of special-status species habitat. The proposed preserve area offers habitat of much better quality and supports or has potential to support multiple special-status plant species. In this context, the contribution of MPArea 1 development to regional loss of special-status plant habitat is evaluated as less than cumulatively considerable. No additional mitigation is required at the cumulative level, and no further analysis is warranted.

Direct injury/mortality of special-status wildlife, and losses of special-status wildlife habitat, would also represent a potential contribution to cumulative impacts on these species. At the incremental (project-specific) level, these impacts would be addressed by the following mitigation measures.

- All special-status wildlife: Mitigation Measure 3.4-2, requiring worker awareness training for sensitive habitats and special-status species to support the effectiveness of habitat- and species-specific measures

- California tiger salamander: Mitigation Measure 3.4-3, requiring completion of the state ITP and Clean Water Act Section 404 permitting processes and adherence to all permit conditions (including AMMs and habitat compensation) and stipulating minimum AMMs for CTS protection

- San Joaquin kit fox: Mitigation Measure 3.4-4, requiring completion of the state ITP process[2] and adherence to all permit conditions (including AMMs and habitat compensation), and stipulating minimum AMMs for SJKF protection

- Crotch's bumble bee: Mitigation Measure 3.4-5, requiring completion of the state ITP process and adherence to all permit conditions (including AMMs and habitat compensation) and stipulating minimum AMMs for Crotch's bumble bee protection

- Vernal pool fairy shrimp: Mitigation Measure 3.4-6, requiring completion of the Clean Water Act Section 404 permitting process and adherence to all permit conditions (including AMMs and habitat compensation). Because of the similarity in the species' habitat needs, Mitigation Measure 3.4-6 would also address potential impacts on California linderiella (known to be present in MPArea 1) and mid-valley fairy shrimp (potentially present)

- Western spadefoot: Mitigation Measure 3.4-7, requiring completion of the Clean Water Act Section 404 process and adherence to all permit conditions (including AMMs and habitat compensation), stipulating minimum AMMs for western spadefoot protection, and providing alternate mitigation in the event western spadefoot does not become federally listed (and thus is not covered by the USFWS BO for MPArea 1 development)

- Western pond turtle: Mitigation Measure 3.4-8, requiring completion of the Clean Water Act Section 404 process and adherence to all permit conditions (including AMMs and habitat compensation), stipulating minimum AMMs for western pond turtle protection, and providing alternate mitigation in the event western pond turtle does not become federally listed (and thus is not covered by the USFWS BO for MPArea 1 development)

- Swainson's Hawk, Cooper's Hawk: Mitigation Measure 3.4-10, which requires preconstruction nesting bird surveys and protection of nesting birds, occupied nests, eggs, and young, consistent with CDFW standards; as discussed in Impact 3.4-1, impacts on adult Cooper's Hawk and Swainson's Hawk individuals are considered unlikely due to the species' wariness and mobility. Mitigation Measure 3.4-11 additionally requires that the needs of Swainson's Hawk be taken into consideration in planning for the mitigation preserve compensating for losses of special-status species habitat, subject to final approval by CDFW

Impacts on all these species were found to be less than significant at the incremental level with the mitigation measures listed above incorporated.

Several other special-status wildlife species are known from the region but have never been observed within MPArea 1 and are considered unlikely to be present based on their known

[2] As noted in Section 3.4-2, SJKF is not considered likely to use MPArea 1, and the Corps and USFWS recently removed it from the ESA Section 7 consultation for MPArea 1 development, but the species is included in the MPArea 1 applicant's application for state ITP coverage.

distribution and/or the generally fairly low quality of habitat onsite. They cannot, however, be entirely ruled out of consideration (see Table 3.4-3 and discussion on page 3.4-45). The potential for impacts on these species would be addressed under Mitigation Measure 3.4-9, which stipulates preconstruction surveys per current agency guidelines and requires consultation with CDFW and/or USFWS for direction if listed species are observed. With this measure in place, potential impacts on the special-status wildlife species considered unlikely to be present were also evaluated as less than significant at the incremental level.

As noted above for special-status plants, impacts on special-status wildlife species and their habitat inherently represent contributions to the cumulative impact reflected by the species' special status. Thus, adequately mitigating the project-specific impact also mitigates the project's contribution to the cumulative impact. Moreover, through the state ITP and ESA Section 7 interagency consultation, the impacts of MPArea 1 development on listed species and their habitat, and compensation for those impacts, will be closely regulated by the state and federal Endangered Species Acts, under which the agencies cannot legally authorize actions that would put a species in jeopardy (that is, substantially worsen the existing cumulative impact). The contribution of MPArea 1 to existing cumulative impacts on special-status wildlife and their habitat is accordingly evaluated as less than cumulatively considerable. No additional mitigation is required at the cumulative level, and no further analysis is warranted.

CONTRIBUTIONS OF MPAREA 2 AND NON-DEVELOPMENT AREA DEVELOPMENT

As discussed in Section 3.4 (see Impact 3.4-1), detailed information on special-status species use of MPArea 2 and the Non-Development Area is currently unavailable, although reconnaissance observations suggest overall habitat conditions and the potential for both special-status plants and special-status wildlife to be present are generally like MPArea 1. It is therefore anticipated that development of MPArea 2 and possible longer-term future development of the Non-Development Area would have at least some potential to affect special-status plants and wildlife, both directly and through habitat modification. Impacts were identified as having the potential to be significant at the incremental level. To address this, the City will require implementation of Mitigation Measures 3.4-12 and 3.4-13.

Together, Mitigation Measures 3.4-12 and 3.4-13 create a framework to protect biological and jurisdictional resources in MPArea 2 and the Non-Development Area in a manner like that established for MPArea 1. Mitigation Measure 3.4-12 requires a comprehensive evaluation of biological resources as part of the development planning process(es) for MPArea 2 and the Non-Development Area, which is to include recommendations for any follow-up actions deemed warranted by the biologist who prepares the evaluation. It also requires the development applicant(s) to obtain any resource agency permits necessary to authorize development, and to implement the required permit conditions, including compensatory mitigation. Mitigation Measure 3.4-13 requires pre-construction nesting bird surveys and protection of nests, eggs, and young, in parallel to the requirements of Mitigation Measure 3.4-10 in MPArea 1. With these measures in places, impacts on special-status species and their habitat because of development in MPArea 2 and the Non-Development Area were evaluated as less than significant at the incremental level. Any

such impacts would also be less than cumulatively considerable, for the same reasons laid out above for impacts in MPArea 1. No additional mitigation is required at the cumulative level, and no further analysis is warranted.

Impact 4.7: Contributions to Adverse Effects on Wildlife Due to Increased Nighttime Lighting (Less than Significant and Less than Cumulatively Considerable

Development in MPArea 1, MPArea 2, and the Non-Development Area would all have the potential to result in adverse effects on both common and special-status wildlife due to the addition of nighttime lighting associated with developed uses (see Impact 3.4-2). This would be addressed through implementation of Mitigation Measure 3.4-14, which limits the use of nighttime lighting and prohibits the types of light sources that are known to be most problematic for wildlife. With this measure in place, "dark sky" impacts resulting from development in all parts of the Project area were found to be less than significant at the incremental level. This measure would also address the project's contribution to cumulative regional impacts consistent with current best design practices and CDFW guidance. Impacts are accordingly evaluated as less than cumulatively considerable. No additional mitigation is required at the cumulative level, and no further analysis is warranted.

Impact 4.8: Contributions to Cumulative Loss and Degradation of Sensitive Natural Communities and Jurisdictional Wetlands/Waters (Less than Significant and Less than Cumulatively Considerable)

CONTRIBUTIONS OF MPAREA 1 DEVELOPMENT

As discussed in Section 3.4 (see Impact 3.4-3), no sensitive habitats other than jurisdictional wetlands/water are present in MPArea 1. This discussion therefore focuses on effects on jurisdictional habitats.

The development layout for MPArea 1 has been configured to avoid impacts on jurisdictional wetlands and waters to the extent feasible, with remaining wetlands buffered by protected open space, as described in Section 2.0 and shown in Figure 3.4-5. Nonetheless, as detailed in Impact 3.4-4, development of MPArea 1 would result in permanent loss of 0.495 acre of wetlands that cannot be avoided while still accomplishing project objectives. This is addressed under Mitigation Measure 3.4-16, which requires the applicant to complete the aquatic resources permitting process with the Corps, the RWQCB, and CDFW, and to implement all permit conditions relative to jurisdictional wetlands and other waters, including AMMs and any habitat compensation required by the agencies. With this commitment in place, impacts of MPArea 1 development on wetlands were evaluated as less than significant at the incremental level.

Critically from the cumulative perspective, the RWQCB's Clean Water Act Section 401 Water Quality Certification process is governed by the "no net loss and long-term gain" objective established by EO W-59-93 (see Section 3.4.2 Regulatory Setting). This means that the RWQCB cannot issue the certification needed to authorize Corps permitting under Clean Water Act Section 404 and ultimately enable construction in MPArea 1 without assurance that wetland losses will be compensated in a manner that accomplishes "no net loss and long-term gain" in wetland acreage and values—effectively setting a standard that precludes any substantive contribution to cumulative wetland

losses because of MPArea 1 development. Impacts are accordingly evaluated as less than cumulatively considerable. No additional mitigation is required at the cumulative level, and no further analysis is warranted.

CONTRIBUTIONS OF MPAREA 2 AND NON-DEVELOPMENT AREA DEVELOPMENT

As Section 3.4 acknowledges (see Impact 3.4-4), no detailed information on the presence of sensitive natural communities or jurisdictional wetlands/waters is currently available for MPArea 2 or the Non-Development Area, although some of the wetlands adjacent to the boundaries of MPArea 1 are known to extend into MPArea 2. Detailed analysis of impacts on wetlands in these areas was determined to be speculative at this time; however, as Impacts 3.4-3 and 3.4-4 identify, it must be acknowledged that development in MPArea 2 and the Non-Development area may have some potential for impacts on sensitive natural communities and jurisdictional wetlands/waters, and such impacts could be significant at the incremental level.

To address impacts on sensitive natural communities, the City will require implementation of Mitigation Measure 3.4-15, which requires avoidance of these habitat types where possible, and compensatory mitigation consistent with prevailing conservation practices and CDFW guidance where avoidance is not feasible and/or function and value would be compromised. With this requirement in place, impacts were evaluated as less than significant at the incremental level. Impacts are also evaluated as less than cumulatively considerable, since this requirement would ensure that the overall function and value of existing sensitive natural communities is either protected in place or replaced, such that there is no overall net loss. No additional mitigation is required at the cumulative level, and no further analysis is required.

To address impacts on wetlands/waters, the City will require implementation of Mitigation Measure 3.4-16, which requires further evaluation of the presence of wetlands/waters within MPArea 2 and the Non-Development Area, with avoidance to the extent feasible, and acquisition of applicable aquatic resources permits from the Corps, RWQCB, and/or CDFW if complete avoidance is not feasible. Development applicants in MPArea 2 and the Non-Development Area will also be required to mitigate any losses of wetlands/waters to the satisfaction of the agencies with jurisdiction. With this measure in place, impacts were evaluated as less than significant at the incremental level.

The RWQCB's independent jurisdiction under the Porter-Cologne Water Quality Control Act (see Section 3.4.2 Regulatory Setting) is critical here; even if Corps permitting—which requires Clean Water Act Section 401 Water Quality Certification—is not triggered, the RWQCB's authorization of wetlands/waters impacts under the Porter-Cologne Act is governed by the same "no net loss and long-term net gain" policy that applies to water quality certification. With this oversight in place, impacts on jurisdictional wetlands/waters due to MPArea 2 and Non-Development Area development would also be less than cumulatively considerable, for the same reasons detailed above for MPArea 1. No additional mitigation is required at the cumulative level, and no further analysis is warranted.

Impact 4.9: Creation of New Cumulative Impacts on Biological and Jurisdictional Resources Through Repeated Activities (No Impact)

Most of the Project's impacts on biological and jurisdictional resources would represent contributions to existing cumulative impacts rather that new impacts per se, and as such are discussed above: impacts on special-status species and their habitats, impacts on sensitive natural communities and jurisdictional wetlands/waters, and impacts related to effects of increased nighttime lighting on wildlife. Impacts on wildlife movement corridors and wildlife nursery sites, to the extent they occur, would represent one-time losses resulting from initial construction of each Project phase, and are addressed at the incremental level in Impacts 3.4-5 and 3.4-6 respectively.

The project would have **no impact** (MPArea 1)/**no material impact** (MPArea 2 + Non-Development Area) regarding conflict with local policies or ordinances protecting biological resources (Impact 3.4-7), and **no impact** regarding conflict with any adopted conservation plan (Impact 3.4-8), and thus would effectively have no potential to create new cumulative impacts over time regarding these issues. No further discussion of these topics is warranted.

A key remaining question is whether the Project has the potential, through repeated activities—beginning during Project construction and continuing through Project occupancy—to place any additional species at a level of risk that qualifies them for special status. This would represent a new significant cumulative impact on the affected species. However, such an outcome is considered very unlikely. This is partly because the Project site—although it is large in the local context—is still comparatively small in the larger regional framework; moreover, the quality of habitat offered by the Project site is limited, as discussed in Section 3.4, and abundant habitat of similar or better quality is present in the surrounding area and throughout remaining undeveloped portions of the east-central San Joaquin Valley. Additionally, as the Project site proceeds towards build-out, its utility to wildlife would decrease, and wildlife remaining onsite would be increasingly limited to species that can adapt to and thrive in a developed or development-adjacent setting; no "attractive nuisance" effect is anticipated. In view of these considerations, the Project is not expected to independently create new impacts related to elevation of additional species to special status. **No impact** is anticipated, and no mitigation at the cumulative level is required.

CULTURAL AND TRIBAL RESOURCES

The geography of cultural resources impact can be defined by region, by political subdivision or by the geography of the cultural resources present in an area, where sufficient inventory data is available to define it. The cumulative setting for cultural resources includes all of Fresno County. There are extensive cultural sites located in the region.

Impact 4.10: Cumulative Impacts on Known and Undiscovered Cultural and Tribal Resources (Less than Significant and Less than Cumulatively Considerable)

Cumulative development anticipated in the City of Clovis, including growth projected by adopted future projects, may result in the discovery and removal of cultural resources, including archaeological, paleontological, historical, and Native American resources and human remains. As

discussed in Section 3.5, Cultural and Tribal Resources, no historic period resources were previously recorded in the Development Area.

Any previously unknown cultural resources which may be discovered during development of the proposed Project would be required to be preserved, either through preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. With implementation of the mitigation measures provided in Section 3.5, the proposed Project is not anticipated to considerably contribute to a significant reduction in cultural resources in the region.

All future projects in the regional vicinity would be subject to their respective General Plans (e.g., City of Clovis, and Fresno County), each of which have policies and measures that are designed to ensure protection of undiscovered cultural resources. In addition, all discretionary projects in these jurisdictions would require environmental review per regulations established in CEQA.

Development of the proposed Project would have a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to cultural resources would result in a **less than cumulatively considerable contribution**.

GEOLOGY AND SOILS

Impacts related to geology and soils are not inherently cumulative. Geology and soils concerns are related to risks, hazards or development constraints that are largely site-specific. However, seismic hazards are regional, and management of seismic hazards is vested with the local planning and building authority. For these reasons, the potential for cumulative geology and soils impacts are considered in the context of the City of Clovis and vicinity.

Impact 4.11: Cumulative Impact on Geologic and Soils Resources (Less than Significant and Less than Cumulatively Considerable)

As discussed in Section 3.6 Geology and Soils, the Project site does not have a significant risk of becoming unstable as a result landslide, subsidence, soil collapse, liquefaction, liquefaction induced settlement, or lateral spreading. The Project site has a low risk of seismic-related ground failure because of liquefaction. Landslide potential on the Project site is also low to non-existent. While the City is not within an area known for its seismic activity, there will always be a potential for ground shaking caused by seismic activity anywhere in California, including the Project site. Seismic activity could come from a known active fault in the region. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Additionally, the City of Clovis has incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

Geologic and soils impacts tend to be site-specific and Project-specific. With the mitigation measures presented in Section 3.6, development of the proposed Project would not result in increased risks or hazards related to geologic conditions in the cumulative setting area, nor would it result in any

off-site or indirect impacts. Development of the proposed Project would have a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to geologic and soil resources would result in a l**ess than cumulatively considerable contribution**.

GREENHOUSE GASES, CLIMATE CHANGE AND ENERGY

The cumulative setting for greenhouse gas emissions and climate change impacts for this analysis is Fresno County, which is the boundary for the California Air Resources Board's regional greenhouse gas emissions reduction targets.

Impact 4.12: Cumulative Impact on Climate Change from Increased Project-Related Greenhouse Gas Emissions (Less than Significant and Less than Cumulatively Considerable)

Greenhouse gas (GHG) emissions from a single Project will not cause global climate change; however, greenhouse gas emission from multiple projects throughout a region or state could result in a cumulative impact with respect to global climate change.

In California, there has been extensive legislation passed with the goal of reducing GHG emissions. The legislative goals are as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a climate action plan. The Secretary of Cal-EPA leads the Climate Action Team, whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the executive order.

As presented in Table 3.7-3, short-term construction emissions of GHGs are estimated at a maximum of approximately 10,367 MT CO_2e per year. As shown in Table 3.7-4, the annual GHG emissions associated with the proposed Project would be approximately 53,518 MT CO_2e under the unmitigated scenario, and 52,051 MT CO_2e under the mitigated scenario (i.e., with implementation of the mitigation measures provided in Section 3.3: Air Quality of the Draft EIR). The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS.

Therefore, development of the proposed Project would have a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to GHG emissions would result in a l**ess than cumulatively considerable contribution**.

Impact 4.13: Cumulative Impact on the Inefficient, Wasteful, or Unnecessary Use of Energy Resources (Less than Significant and Less than Cumulatively Considerable)

The proposed Project would use energy resources for the operation of Project buildings (electricity), outdoor lighting (electricity), for on-road vehicle trips (e.g., gasoline and diesel fuel) rerouted by the proposed Project and from off-road and on-road construction activities associated with the proposed Project (e.g., diesel fuel). Each of these activities would require the use of energy

resources. The proposed Project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through statewide and local measures.

The proposed Project would follow all applicable federal, State, and local regulations regulating energy usage. For example, PG&E, the electric provider to the proposed Project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. PG&E has achieved at least a 33 percent mix of renewable energy resources in 2020 and is on track to achieve 60 percent mix of renewable energy by 2030. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

The proposed Project would comply with all existing energy standards and would not be expected to result in significant adverse impacts on energy resources. For these reasons, the proposed Project would not cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by the *CEQA Guidelines*. Therefore, development of the proposed Project would have a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to energy resources would result in a l**ess than cumulatively considerable contribution**.

HAZARDS AND HAZARDOUS MATERIALS

The cumulative context for the analysis of cumulative hazards and human health impacts Fresno County, including all cumulative growth therein, as represented by full implementation of each respective General Plan (i.e., Clovis and Fresno County). As discussed in Section 3.8 Hazards and Hazardous Materials, development of the proposed Project would not result in any significant impacts related to this environmental topic with the implementation of the mitigation measures provided in Section 3.8.

Impact 4.14: Cumulative Impact Related to Hazards and Hazardous Materials (Less than Significant and Less than Cumulatively Considerable)

The proposed Project, in conjunction with cumulative development in the region, would include areas designated for a variety of uses as defined by the applicable General Plan. Cumulative development would include continued operation of, or development of, new facilities as allowed under each land use designation. New development would inevitably increase the use of hazardous materials within the region, resulting in potential health and safety effects related to hazardous materials use. For the most part, potential impacts associated with new and future development would be confined to commercial and industrial areas and would not involve the use of hazardous substances in large quantities or that would be particularly hazardous. Incidents, if any, would typically be site specific and would involve accidental spills or inadvertent releases. Associated

health and safety risks would generally be limited to those individuals using the materials or to persons in the immediate vicinity of the materials and would not combine with similar effects elsewhere (i.e., construction workers). Hazard-related impacts tend to be site-specific and Project-specific. The Project site is not associated with any existing hazardous materials spills; however, there are numerous areas throughout the County where hazardous conditions are present.

With respect to the potentially cumulative risk related to wildfire, the potential hazard to development is present in various areas of the County, particularly in areas with an abundance of fuel (i.e., grassland) and in the foothill areas of the County. The vegetation and topography found in the eastern portions of the City, coupled with hot, dry summers, present fire hazards during critical fire periods for much of Fresno County. The Project site is not categorized as a very high fire hazard severity zone or a State Responsibility Area, and increased development on the Project site and surrounding areas would result in a decrease in wildfire risk, as sites would be graded cleared of fuel. Furthermore, as with the Project, cumulative development in the region would be required to comply with all applicable regulations related to the provision of fire water, emergency access, and construction materials that would minimize and/or prevent fire loss and damage.

Development of the proposed Project would not result in significant increased risks of hazards or wildfire in the cumulative setting area, nor would it result in any significant off-site or indirect impacts. Mitigation measures have been included to reduce the risk of on-site hazards associated with the use of on-site hazardous materials. Development of the proposed Project would have a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to hazards and hazardous materials would result in a **less than cumulatively considerable contribution**.

HYDROLOGY AND WATER QUALITY

Potential cumulative issues associated with surface waters can be addressed on a watershed basis, or in the case of groundwater, in the context of a groundwater basin. Because water resources are highly interconnected, the cumulative setting is based on Fresno County, which is in the Tulare Lake Hydrological Region, which covers about 16,800 square miles and includes all of Kings and Tulare counties and most of Fresno and Kern counties. Cumulative development in this region, including the proposed Project, would impact the water quality and hydrological features of the Tulare Lake Hydrologic Region. Clovis is underlain by the Kings Groundwater Subbasin. The Kings Subbasin is bounded on the north by the San Joaquin River, on the west by the Delta-Mendota and Westside Subbasins, the south by the Kings River South Fork and the Empire West Side Irrigation District, and on the east by the Sierra Nevada foothills. Any matter that may affect water quality draining from the Project site will eventually end up in the Delta or within the groundwater basin.

Impact 4.15: Cumulative Increases in Peak Stormwater Runoff from the Project site (Less than Significant and Less than Cumulatively Considerable)

Development of the proposed Project would increase the amount of impervious surfaces in the Project site, which could increase peak stormwater runoff rates and volumes on and downstream

on the Project site. However, the proposed Project includes an extensive system of on-site stormwater collection facilities to accommodate the increased stormwater flows that would originate in the Project site.

The proposed stormwater collection system functions through storm drainage collection, treatment, and discharge. The exact sizing of the underground piping will be engineered during the preparation of the improvement plans, which will be in coordination with FMFCD. The proposed storm drainage collection and detention system will be subject to the State Water Resources Control Board Requirements (SWRCB), City of Clovis regulations; Phase II, National Pollutant Discharge Elimination System (NPDES) Permit Requirements; NPDES-MS4 Permit Requirements; and LID Guidelines.

Stormwater quality standards imposed and monitored by the Environmental Protection Agency and the SWRCB through the NPDES permit require treatment of stormwater runoff prior to its release into drainage features. Stormwater quality is an integral part of the FMFCD's stormwater management system. With the design and construction of flood control improvements included in the proposed storm drainage system in accordance with FMFCD's requirements, the proposed Project would have a **less than significant** impact relative to this topic. As such, impacts related to stormwater runoff would result in a **less than cumulatively considerable contribution**.

Impact 4.16: Cumulative Impacts Related to Degradation of Water Quality (Less than Significant and Less than Cumulatively Considerable)

The San Joaquin River is specifically listed by the Central Valley Regional Water Quality Control Board (CVRWQCB) as an impaired water body due to mercury under the Clean Water Act. Mercury is a sediment-based pollutant that can be released into the water column during various in-water construction activities (e.g., construction of the storm drain outfall) that may disturb the sediment and cause turbidity. As a result, such activities may increase the likelihood of mercury exposure to the public and wildlife that utilize the San Joaquin River.

In accordance with the NPDES Stormwater Program, the Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, and runoff during construction activities. Such BMPs may include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover. The BMPs and overall SWPPP is reviewed by the RWQCB as part of the permitting process. The SWPPP, once approved, is kept on site, and implemented during construction activities and must be made available upon request to representatives of the RWQCB and/or the lead agency. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB.

The ongoing operational phase of the proposed Project (all phases) requires discharge of stormwater into the on-site detention basins, which would ultimately flow into the FMFCD system.

The discharge of stormwater must be treated through BMPs prior to its discharge. The standards and regulations contained above would ensure that BMPs are implemented to reduce the amount of pollution in stormwater discharged from the Project site into the FMFCD system. Storm water drainage is managed through the implementation of BMPs to the extent they are technologically achievable to prevent and reduce pollutants. The City requires reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses. The management of water quality through BMPs is intended to ensure that water quality does not degrade to levels that would violate water quality standards.

The use of BMPs is intended to treat runoff close to the source during the construction and long-term operational phase of the Project to reduce stormwater quality impacts. The required erosion control measures are existing regulatory requirements. Development of proposed Project would have a **less than significant** impact relative to this topic. As such, impacts related to water quality would result in a **less than cumulatively considerable contribution**.

Impact 4.17: Cumulative Impacts Related to Degradation of Groundwater Supply or Recharge (Less than Significant and Less than Cumulatively Considerable)

The proposed Project would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement, significantly reduce infiltration capacity and increase surface water runoff.

The soils contained on the Project site have a hydrologic rating ranging from "A," which is indicative of soils having a high infiltration rate (low runoff potential) when thoroughly wet, to "D," which is indicative of soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.[3] Additionally, as indicated in the Geotechnical Investigation, very dense weakly cemented silty sand, sandy silt, clayey sand, and silty sand/clayey sand, locally referred to as "hardpan," were encountered in several of the borings at the Project site.[4] This cementation inhibits the free percolation of surface water into the soil stratum below the hardpan. Therefore, it can be presumed that portions of the Project site do not allow for a high level of groundwater recharge in the existing condition.

The proposed Project would result in new impervious surfaces within the Master Plan area, which could reduce rainwater infiltration and groundwater recharge compared to existing conditions. However, the Project would include open space areas, including landscaped areas and 59 acres of parks, trails, and open space within MPArea 1, which would remain largely pervious. This includes the portion of Big Dry Creek Reservoir Outlet Works Channel that runs through the Project site.

[3] United States Department of Agriculture, National Resource Conservation Service, Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed February 2024.

[4] Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues, Clovis California. January 31, 2024.

Further, areas developed with impervious surfaces would route stormwater into the proposed Project's storm drainage system and to FMFCD facilities designed to retain and infiltrate groundwater, eventually discharging to irrigation canals, creeks, and the San Joaquin River. Therefore, while the proposed Project would result in an increase in the amount of impervious surfaces within the Project site when compared to existing conditions, it is not anticipated that the proposed development would interfere substantially with groundwater recharge.

The Project site is in the Kings Groundwater Subbasin. The Kings Subbasin is recharged by water from sources including streams, percolation of rainfall and irrigation water, inflow from other groundwater basins, and intentional recharge at numerous facilities. Intentional recharge is conducted in recharge ponds and on some farm fields with compensation to landowners. The hardpan encountered on the Project site generally does not allow for a high infiltration rate. While the proposed Project would result in an increase in the amount of impervious surfaces within the Project site when compared to existing conditions, it is not anticipated that the proposed development would interfere with groundwater recharge, as much of the groundwater recharge in the basin occurs in the sand and gravels along the San Joaquin River from the Sierra Nevada snowmelt flowing downstream.

Water supply, including any new demand on groundwater, is fully discussed in Section 3.14 Utilities and Services Systems. The Kings Subbasin groundwater sustainability plan Groundwater Sustainability Plan (GSP) has been accepted and approved to comply with the Department of Water Resources. The proposed Project does not conflict with this GSP.

For the reasons mentioned above, the proposed Project would not cause the substantial depletion of groundwater supplies, interfere substantially with groundwater recharge, or conflict with the GSP. As such, development of the proposed Project would have a **less than significant** impact relative to this topic. As such, impacts related to groundwater supply or recharge would result in a **less than cumulatively considerable contribution**.

Impact 4.18: Cumulative Impacts Related to Flooding (Less than Significant and Less than Cumulatively Considerable)

As shown on Figure 3.9-2, most of the Project site is located within an area of minimal flood hazard. A portion of the Project site is located within the 500-year flood zone and a portion of the Project site, within the Big Dry Creek Reservoir Outlet Works Channel (a man-made channel), is within the 100-year flood zone. The portion of the Project site within the 100-year flood zone (associated with Big Dry Creek Reservoir Outlet Works Channel) runs in a southwesterly direction through the center of the Development Area. There are no areas of proposed development within the Project site that are designated as having an increased flood risk due to levee, nor are any these areas located within a regulatory floodway.

The Project site is located within dam failure inundation areas associated with the Big Dry Creek Dam, as shown in Figure 3.9-3. The Big Dry Creek Dam is under the oversight of the Division of Safety of Dams (DSOD). Regular inspection by DSOD and maintenance by the dam owners ensure that dams are kept in safe operating conditions. The proposed Project would not result in actions that could

result in a higher likelihood of dam failure at Big Dry Creek Dam. There will always be a remote chance of dam failure that results in flooding within dam inundation areas, including the Project site and other surrounding areas. However, with oversight and ongoing monitoring performed by the DSOD, dam failure is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

Through compliance with these existing regulations, development of the proposed Project would have a **less than significant** and **less than cumulatively considerable** impact relative to this topic.

LAND USE, POPULATION, AND HOUSING

The cumulative setting for land use and population impacts is the City of Clovis.

Impact 4.19: Cumulative Impact on Communities and Local Land Uses (Less than Significant and Less than Cumulatively Considerable)

Cumulative land use impacts, such as the potential for conflicts with adjacent land uses and consistency with adopted plans and regulations, are typically site- and Project-specific. As shown in Table 3.10-3, the Project is consistent with the City's existing General Plan policies and would not conflict with policies adopted to avoid or mitigate an environmental effect. When land uses are not consistent with a General Plan, there are two courses of action: 1) the uses are not allowed due to the inconsistency, or 2) the land uses are changed through an amendment to the General Plan to create consistency. The proposed Project will require a General Plan Land Use Amendment to adjust the land use designation to Mixed Use Village for the Development Area to accommodate the proposed development density. The proposed modification to the original boundaries of the City of Clovis General Plan Focus Area 13 would memorialize the 507-acre Master Plan as a subarea of Focus Area 13. The proposed General Plan land use designation for the Development Area is shown on Figure 2.0-7 Chapter 2.0: Project Description. Figure 2.0-8 Chapter 2.0: Project Description illustrates the Focus Area 13. Approval of the General Plan amendment would ensure that the proposed Project would be substantially consistent with the Clovis General Plan land use requirements.

Approval of the General Plan amendment would ensure that the proposed Project would be substantially consistent with the Clovis General Plan land use requirements and would have a **less than significant** and **less than cumulatively considerable** impact relative to the Clovis General Plan.

The Clovis Zoning Code implements the General Plan. The Project site is currently within the jurisdiction of Fresno County. The Fresno LAFCo will require the Project site to be pre-zoned by the City of Clovis in conjunction with the proposed annexation. The Project contemplates a pre-zoning request for the Master Plan area to the following City of Clovis zone districts: R-1, R-1-MD, R-2, R-4, C-1, C-R, M-1, and O. Since all these zone districts are within the M-P-C Overlay District, they would include the M-P-C suffix and subject to the development standards as modified and adopted in the Master Plan.

- **Single Family Residential Low-Density Zoning (R-1):** This designation identifies areas appropriate for conventional single-family uses. The allowable density range is 2.1 to 5.0 du/acre.

- **Single Family Residential Medium-Density Zoning (R-1-MD):** This designation identifies areas appropriate for single-family uses, including attached and detached single-family structures. The allowable density range is 4.1 to 12.0 du/acre.

- **Single Family Residential Medium High-Density Zoning (R-2):** This designation identifies areas appropriate for moderately dense residential uses, including multifamily apartments, duplexes, townhouses, and small parcel, attached, and detached single-family uses. The allowable density range is 7.1 to 15.0 du/acre.

- **Multi-Family Residential Very High-Density Zoning (R-4):** This designation identifies areas appropriate for high and very high density residential uses, particularly in association with mixed-use development. The allowable density range is 25.1 to 43.0 du/acre.

- **Neighborhood Commercial Zoning (C-1):** This designation identifies areas appropriate for providing convenience services, compatible with adjacent neighborhood areas.

- **Community Recreation Zoning (C-R):** This designation identifies areas appropriate for commercial recreation into a planned integrated center for the community.

- **Light Industrial Zoning (M-1):** This designation identifies areas appropriate for business parks and industrial uses, including mini- storage facilities.

- **Open Space and Parks Zoning (O):** This designation identifies areas appropriate for open space, such as parks, flood control channels, greenbelts, parkways, ponding basins, trails, and wildlife preserves.

The proposed City of Clovis zoning for the Project site is shown on Figure 2.0-9 in Chapter 2.0.

The zoning ordinance establishes permitted uses, development densities and intensities, and development standards for each zone to ensure that public health, safety, and general welfare are protected, consistent with the purpose of the Zoning Code. All existing City development standards and zoning requirements for the proposed zoning are applicable to any activities on the Project site. The City will review each component of the proposed Project as plans (improvement plans, building plans, site plans, etc.) are submitted for final approval to ensure that they are consistent with the City's Zoning ordinance. Approval of the pre-zoning will ensure that the proposed Project will be consistent with the Zoning Code and will have a **less than significant** and **less than cumulatively considerable** impact relative to the Clovis General Plan.

In addition, the Fresno LAFCo policies discussed in Section 3.10: Land Use, Population, and Housing are intended to ensure orderly reorganization to local jurisdictional boundaries, including annexations. Ultimately, LAFCo will determine whether the proposed annexation would first require

an update to the *Clovis Municipal Service Review* to approve the annexation. This LAFCo policy was not specifically adopted to avoid or mitigate an environmental effect, rather it is intended to ensure orderly and logical reorganization to local jurisdiction boundaries, including annexations. The proposed Project is consistent with LAFCo policies adopted to address environmental impacts. As such, development of the proposed Project will have a **less than significant** and **less than cumulatively considerable** impact relative to this topic.

Impact 4.20: Cumulative Impacts on Population and Housing (Less than Significant and Less than Cumulatively Considerable)

As described in Section 3.10, the Project site consists of a combination of fallow and grazing land, several rural residences, offices and Contractor's Corp Yard and small tree nursery. Implementation of the Project would increase housing in the area by up to 3,286 residential units. As such, and due to the small number of existing residences, the proposed Project would not displace substantial numbers of people or existing housing. Using the most recent Department of Finance (2023) estimate for the average number of persons residing in a dwelling unit in the City of Clovis of 2.84, the addition of 3,286 housing units could increase the population of the City by an estimated 9,333 persons.

While the proposed Project will result in growth, it is not anticipated to significantly induce growth. development of the proposed Project will have a **less than significant** impact relative to this topic. As such, impacts related to population and housing would result in a **less than cumulatively considerable contribution**.

NOISE

The cumulative context for noise impacts associated with the proposed Project consists of the existing and future noise sources that could affect the Project or surrounding uses. Noise generated by construction would be temporary, and would not add to the permanent noise environment or be considered as part of the cumulative context.

Impact 4.21: Cumulative Exposure of Existing and Future Noise-Sensitive Land Uses to Increased Noise Resulting from Cumulative Development (Less than Significant with Mitigation and Less than Cumulatively Considerable)

EXTERIOR NOISE IMPACTS TO ON-SITE RECEPTORS DUE TO PROJECT GENERATED TRAFFIC

The Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Residences along Shepherd Avenue, between Temperance Avenue and Locan Avenue, will be exposed to levels up to 69.4 dBA CNEL at the respective property lines. These are within the normally compatible levels for residential uses, but above the exterior 65 dBA CNEL standard as outlined in Table ES-1 of the City of Clovis 2014 General Plan.

To meet the exterior residential standards of 65 dBA CNEL, the unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue must be shielded by six-foot sound barrier walls. These walls must be at least 4.2 pounds per square foot (lbs/ft^2). Any unshielded residential glass

facades within 80 feet of the centerline of Shepherd Avenue directly facing the subject roadway must have a sound transmission class rating of 30 or more. This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.

OPERATIONAL NOISE INCREASES

The proposed Project would include typical residential noise sources which would be compatible with the adjacent existing residential uses (a.k.a. neighborhood traffic, yard equipment, truck deliveries, garbage collected, etc.). The Project's proposed park uses are located internal to the Project site and would not impact off-site residential uses.

EXTERIOR TRAFFIC NOISE AT PROPOSED USES

The Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Residences along Shepherd Avenue will be exposed to levels up to 69.4 dBA CNEL at the property line. These are within the normally compatible levels for residential uses, but above the exterior 65 dBA CNEL standard as outlined in Table ES-1 of the City of Clovis 2014 General Plan. Thus, this is considered a potentially significant impact.

To meet the exterior residential standards of 65 dBA CNEL, the unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue must be shielded by six-foot sound walls, as required my Mitigation Measure 3.11-1. Implementation of Mitigation Measure 3.11-1 would reduce exterior residential noise levels below the 65 dBA CNEL noise standard.

Furthermore, as required by Mitigation Measure 3.11-2, any unshielded residential glass facades within 80 ft of the centerline of Shepherd Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor windows which would not be shielded by the six-foot sound walls. Implementation of these mitigation measures will ensure that these potential impacts are reduced to a **less than significant** level.

INTERIOR NOISE IMPACTS AT PROPOSED RESIDENTIAL USES

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dBA CNEL, or less, will typically comply with the City of Clovis 45 dBA CNEL interior noise level standard.

As mentioned before, the Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Compliance with City of Clovis Noise and Vibrations Ordinance and Municipal Code, Chapters 9.22.080 and 9.22.100 would ensure that Project-related noise impacts would be further reduced. Clovis General Plan Noise Element Policies 3.1 to 3.14 include specific mitigation measures and design requirements and guidelines to further reduce potential noise impacts. Therefore, this impact would be **less than significant**.

CONSTRUCTION NOISE

During the construction of the Project, including roads, water, sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the Project vicinity. Construction noise is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City of Clovis Municipal Code Section 5.27.604. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the Project vicinity.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Noise levels will be the loudest during the grading phase. The modeling assumes construction equipment as close as 25 feet from the adjacent residences and an average of 300 feet away from the adjacent residences. Unmitigated noise levels at 300 feet have the potential to reach 67 dBA L_{eq} and 93 dBA L_{max} at the nearest sensitive receptors during grading. Noise levels for the other construction phases would be lower, approximately from 53 to 66 dBA L_{eq} and 86 to 91 dBA L_{max}

Noise reduction policies within the General Plan Noise Element and standards within the Municipal Code are provided to further reduce construction noise. Mitigation Measure 3.11-3 embodies a preexisting legal requirement from City of Clovis Municipal Code Section 5.27.604 that ensures that construction activities are performed within specific hours. Mitigation Measure 3.11-4 provides specific requirements for attenuating noise during construction. With implementation of the Mitigation Measure 3.11-3 and 3.11-4, potential impacts would be **less than significant**.

CONCLUSION

As shown in Table 3.11-10 (see Chapter 3.11 Noise), when comparing the cumulative plus Project levels, Locan Avenue from Shepherd Avenue to Nees Avenue has the potential for a significant cumulative impact as the only roadway segment with an increase of more than three dB. This segment is in the City of Clovis. The Project will, however, stay within normally compatible levels for single family residential uses along this segment. Therefore, impacts related to cumulative noise would be **less than significant**.

With implementation of Mitigation Measures presented in Chapter 3.11 Noise, development of the proposed Project would have a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to construction noise would result a **less than cumulatively considerable contribution**.

PUBLIC SERVICES AND RECREATION

Cumulative setting would include all areas covered in the service areas of the Clovis Fire Department (CFD), Clovis Police Department (CPD), the City of Clovis Parks and Recreation Division, the Clovis Unified School District (CUSD), and any other relevant public services.

Impact 4.22: Cumulative Impact on Public Services and Recreation (Less than Significant and Less than Cumulatively Considerable)

Development of the proposed Project would contribute toward an increased demand for public services and facilities within the City of Clovis. It has been determined that the impacts to the CFD, CPD, City of Clovis Parks and Recreation Division, and CUSD, would be less-than-significant. The proposed Project would be subject to all fees that are paid toward the enhancement of public services within the City. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would assist in maintaining existing fire, police, schools, and park services. development of the proposed Project would have a **less than significant** cumulative impact relative to this environmental topic. As such, impacts related to public services would result in a **less than cumulatively considerable contribution**.

TRANSPORTATION AND CIRCULATION

The cumulative context for transportation is the Fresno County region, including forecasts provided in the 2022 Fresno Council of Governments (COG) Regional Transportation Plan and Sustainable Communities Strategy. Project trip distribution was developed using the Fresno COG activity-based travel demand model for the transportation analysis zone model runs.

Impact 4.23: Under Cumulative conditions, Project development would result in VMT increases that are greater than 87 percent of Baseline conditions (Cumulatively Considerable and Significant and Unavoidable)

Table 3.13-3 in Section 3.13 presents the existing (2019) regional and project vehicle miles traveled (VMT) per capita and per employee. As shown in Table 3.13-3, the Project VMT per capita is approximately 116 percent higher than Fresno County's VMT per capita threshold and approximately 99 percent higher than the VMT per employee threshold. Project design features aim to promote overall mobility with the goal of reducing VMT and reducing GHG emissions. Implementation of these Project design features may possibly reduce the Project's VMT. The Project design features can help offset some of the VMT impacts of the Project but the reduction does not reduce the impact to a less than significant level.

Because the development would generate vehicle travel exceeding 13 percent below the established regional average under Existing and Cumulative Conditions, even with implementation of Project Design measures that provide mitigating effects, development of the proposed Project would have a **cumulatively considerable contribution** and **a significant and unavoidable** impact.

Impact 4.24: Under Cumulative conditions, the proposed Project would not conflict with a program, plan, policy or ordinance addressing the circulation system, including transit, bicycle, and pedestrian facilities, or increase hazards due to a design feature, incompatible uses, or inadequate emergency access (Less than Significant and Less than Cumulatively Considerable)

The City of Clovis Active Transportation Plan (2022) and City of Clovis General Plan (2014) were reviewed to determine if the proposed Project results in any inconsistencies with adopted

transportation related policies, and the Project is not anticipated to conflict with policies, plans, and programs addressing the circulation system for alternative modes.

Buildout of the proposed Master Plan would result in some changes to the City's circulation network in the vicinity of the project but would not increase hazards or incompatible uses due to design features. Roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, and would have to meet design guidelines such as the accessibility requirements of Title 24 (California Building Code), ADA and PROWAG standards, California Manual of Uniform Traffic Control Devices (MUTCD), and the Caltrans Roadway Design Manual. Therefore, development of the proposed Project would not result in a conflict with an existing or planned pedestrian facility, bicycle facility, or transit service/facility.

Additionally, the proposed Project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, substantially increase hazards due to a geometric feature, or result in inadequate emergency access. Therefore, development of the proposed Project would be **less than significant** relative to this topic. The Project would result in a **less than cumulatively considerable contribution** to this topic.

UTILITIES

The cumulative setting includes all areas covered in the service areas of the City's wastewater system, water system, stormwater system, and the solid waste collection and disposal services.

Impact 4.25 Cumulative Impact on Wastewater Utilities (Less than Significant and Less than Cumulatively Considerable)

The proposed Project would increase the amount of wastewater requiring treatment. According to the City's 2017 Wastewater Master Plan Update, single-family residential uses are estimated to generate 55 gallons per capita per day or 175 gallons per day per equivalent dwelling unit (edu) for single family residential land uses and 142 gallons per day edu for multi-family residential units. The Project site includes up to 3,268 single- and multi-family residential units. Using the more conservative rate which assumes that the Project would only develop single-family residential uses, the proposed Project would generate approximately 575,050 gallons per day (or 0.575 mgd) of wastewater. Hydraulic modeling updates represent more flexibility in construction and unit types, which estimated the Project's average dry weather flow at approximately 0.513 mgd of wastewater. Occupancy of the proposed Project would be prohibited without sewer allocation. An issuance of sewer allocation from the City's available capacity would ensure that there would be a final determination by the wastewater treatment and/or collection provider that there is adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the Regional Water Reclamation Facility (RWRF) with a subsequent allocation of capacity to the proposed Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments.

The Fresno-Clovis Regional Wastewater Treatment Facility is currently in compliance with the WDR requirements of Order No. R5-2018-0080. The projected flows of the proposed Project are not expected to exceed the treatment capacity available for treatment. Full buildout of the proposed Project would slightly increase the existing treatment demand at the RWRF. As described above, the City must also periodically review and update their Utility Master Plans, including the Wastewater Master Plan, and as growth continues to occur within the City, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. These pre-existing proactive efforts ensure the City would be able to reliably treat the wastewater as the community expands its population up to and through the next plant expansion, including with development of the proposed Project.

The City of Clovis Water Reuse Facility is currently in compliance with the WDR requirements of Order No. R5-2019-0021 NPDES NO. CA0085235. The projected flows of the proposed Project are not expected to exceed the treatment capacity available for treatment. Full buildout of the proposed Project would slightly increase the existing treatment demand at the RWRF. As described above, the City must also periodically review and update their Utility Master Plans, including the Wastewater Master Plan, and as growth continues to occur within the City, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. These pre-existing proactive efforts ensure the City would be able to reliably treat the wastewater as the community expands its population up to and through the next plant expansion, including with development of the proposed Project.

A majority of the Master Plan has been planned for urban uses and is identified in the City's General Plan as being located within the Northeast Urban Center and specifically, within Focus Area 13. As such, the Master Plan has been anticipated for potential development. Given that projected wastewater generation volumes associated with the buildout of the Master Plan would not exceed the projected wastewater generation volumes described in the Wastewater Master Plan and the Urban Water Management Plan, as described under Impact 3.14-1. Development of the proposed Project would have a **less than significant** and **less than cumulatively considerable** impact relative to this topic.

The wastewater collection and conveyance system that will serve the proposed Project will consist of engineered infrastructure consistent with the City's existing infrastructure requirements. New wastewater collection and conveyance infrastructure needed for the proposed Project will require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients. The applicant will refine the wastewater collection/conveyance infrastructure design through the development of improvements plans which undergo review by the Engineering Division to ensure consistency with the City's engineering standards. This improvement plan process will include full engineering design (i.e., location, depth, slope, etc.) of all conveyance infrastructure as well as a review of new sewer pump stations and new force mains if needed. Ultimately, the sanitary sewer collection system will be an underground collection system installed as per the City of Clovis standards and specifications.

Therefore, the installation of the wastewater collection and conveyance system infrastructure to serve the proposed Project would have a less than significant impact relative to this topic. The wastewater treatment plant would not require upgrades or improvements to serve the proposed Project. Therefore, development of the proposed Project would have a **less than significant** and **less than cumulatively considerable** impact relative to this topic.

Impact 4.26: Cumulative Impact on Water Utilities (Less than Significant and Less than Cumulatively Considerable)

The Project area will be annexed to the City and will require an extension of existing potable and non-potable systems. The proposed water system will be located within the proposed public utilities easements and be connected to existing City mains and will comply with City Master Plans and standards. The City of Clovis provides water supplies to the City of Clovis. The City has three main water supply sources: groundwater, surface water, and recycled water. The City extracts groundwater from the Kings Subbasin. Surface water is delivered to the City by the Fresno Irrigation District (FID). The various surface water supplies are from the Kings River and Central Valley Project. The City's Water Reuse Facility produces tertiary treated effluent that can be used for agriculture or landscape irrigation.

The proposed Project would be served by a new potable water distribution system. Future phases of the Project would require new water supply infrastructure that would extend beyond the proposed Project boundaries. The precise nature and size of these improvements has not yet been determined; however, it is anticipated that these extended water infrastructure improvements be within existing rights-of-way along adjacent roadways or public utility easements and connected to existing City main lines. The proposed water distribution system would comply with City Master Plans and standards and would have at least two points of connection to existing City mains. These future improvements would likely extend from the northern Project boundary to the west along Behymer Avenue until approximately 770 feet west of Sunnyside Avenue, as well as along Perrin Road, extending west until approximately Burgan Avenue. The Master Plan would include the development of an on-site non-potable water distribution system that would eventually provide irrigation water to planned parks, open space, and landscaped areas.

Furthermore, the construction of the new water facilities, which are associated with future buildout of the proposed Project, have the potential to cause environmental impacts. The potential for environmental impacts associated with the installation of the water system and all construction activities within the Development Area of the Project Site, are addressed throughout this EIR. In some cases, the direct and indirect impacts are potentially significant and warrant mitigation measures, while in other cases there are significant and unavoidable impacts. The future water infrastructure would fall within the range of environmental impacts disclosed in this EIR and would be subject to relevant mitigation measures included in this EIR. The environmental impacts of constructing and operating the new water distribution infrastructure are discussed in Chapters 3.1 through 3.9, 3.14, and 4.0 of this Draft EIR. Therefore, development of the proposed Project would have a less than significant impact relative to this topic.

Projected Water Supply and Demand for the Proposed Project: Water demands for the proposed Project will be served using the City's existing and future portfolio of water supplies. The inclusion of existing and planned future supplies is specifically allowed by the Water Code:

> *Water Code section 10631(b): Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).*

The applicants for the proposed Project will provide their proportionate share of required funding to the City for the acquisition and delivery of treated potable water supplies to the Project site.

Water would be delivered to the Project via the City's existing and planned distribution system. The Project will receive water supply from the City's water distribution system, which relies on both groundwater and surface water supplies. According to the Water Supply Assessment (WSA) prepared for the proposed Project, the City has adequate supplies to meet the needs of all the City's water customers, including the proposed Project, in normal water years, over the 20-year planning horizon. In the buildout year, if demand is as projected, the City will have sufficient water to meet dry year demands of all dry year types.

Determination of Water Supply Sufficiency Based on the Requirements of SB 610: Water Code section 10910 states:

> *10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.*

Pursuant to Water Code section 10910(c)(4) and based on the technical analyses described in the UWMP, the total projected water supplies determined to be available for the proposed Project during Normal, Single Dry, and Multiple Dry years during a 20-year projection will meet the projected water demand associated with the proposed Project as shown in table 4.0-2, in addition to existing and planned future uses.

Conservation measures, detailed in the Water Shortage Contingency Plan, have been developed that would mitigate possible shortfalls by reducing demand by approximately 15 percent. Evidence from the 2013 to 2015 drought suggests that those results, and more, are achievable. Additionally, as the City has surplus water supplies in normal years, short-term additional groundwater extraction in the single-dry and multiple-dry years is also planned as part of their water portfolio. Furthermore, the City has plans to continue to acquire water supplies and construct infrastructure to supply current and future water users. Therefore, the WSA concludes that the City of Clovis has adequate water supplies to meet the needs of the City in normal and multi-dry years.

Since the 2020 UWMP was adopted, four WSAs have been prepared for the City, including the WSA prepared for the Project. It is important to understand the cumulative impact of the additional demands associated with WSAs over and beyond the demands analyzed in the 2020 UWMP. Table 4.0-2 includes those demands noted in the UWMP, as well as the additional demands above the UWMP associated with the Project. Only the "additional demand" is noted in the table below, as the rest of the demand was already accounted for in the UWMP. Similarly, the noted Excess/Deficit reflects the difference between these summated demands and the total supply noted in the UWMP. This approach accounts for the additional demands associated with the proposed land use type above the demands associated with the originally planned land use type. Two conclusions can be made:

- Near-term: there is an excess of supply in all conditions, even with the additional demands imposed by the proposed Project.
- Long-term: the WMP evaluated the City's build-out of the General Plan based on assumed land use densities. The Project increases the density of those areas with calculated demands documented in the WMP and develops into an area without water demands associated with it in the WMP. The impact of those increases equates to an additional water supply needed for the Project of approximately 798 AFY.

The projected water supply and demand for the proposed Project is shown in Table 4.0-2, below.

TABLE 4.0-2: SUMMARY OF PROJECT WATER SUPPLIES AND DEMANDS

2020 UWMP SUPPLY AND DEMAND COMPARISON RESULTS	*NORMAL DRY YEAR (2035)*	*SINGLE-DRY YEAR*	*MULTIPLE-DRY YEAR*				
			YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
Excess/<Deficit> in Supply	18,612	811	13,908	11,536	6,203	811	17,719
Excess/<Deficit> in Supply with Conservation	--	6,276	17,490	17,758	15,597	13,880	19,965
ADDITIONAL DEMANDS ASSOCIATED WITH WSAS PREPARED SINCE THE 2020 UWMP							
Home Place Master Plan (Approved March 2021)	No Additional Demand Associated with WSA						
Tract 6205 SOI Expansion (Approved 2024)	256	256	256	256	256	256	256
Tract 6343 (Approved 2024)	79	79	79	79	79	79	79
Vista Ranch SOI Expansion (Approval Anticipated by Fall 2024)	439	439	439	439	439	439	439
Excess/(Deficit) in Supply including Additional Demands from Approved WSAs	**17,838**	**37**	**13,134**	**10,762**	**5,429**	**37**	**16,945**
Excess/(Deficit) in Supply with Conservation including Additional Demands Approved WSAs[1]	**--**	**5,618**	**16,832**	**17,100**	**14,939**	**13,222**	**19,307**

SOURCE: PROVOST & PRITCHARD CONSULTING GROUP, WATER SUPPLY ASSESSMENT, VISTA RANCH. MARCH 2024.
NOTES: AFY = ACRE-FEET PER YEAR.
[1] PER THE UWMP, CONSERVATION EFFORTS WILL REDUCE THE DEMANDS BY AN ESTIMATED 15%, WHICH IS REFLECTED IN THE VALUES IN THE TABLE.

The WSA concludes that the City has adequate supplies to meet the needs of all the City's water customers, including the proposed Project, in normal water years, over the 20-year planning horizon. In the buildout year, if demand is as projected, the City will have sufficient water to meet dry year demands of all dry year types.

CONCLUSION

The technical analyses shows that the total projected water supplies determined to be available for the proposed Project during Normal, Single Dry, and Multiple Dry years during a 20-year projection will meet the projected water demand associated with the proposed Project, in addition to existing and planned future uses. The proposed Project would not result in insufficient water supplies available to serve the Project from existing entitlements and resources. Therefore, the proposed Project would result in a **less than significant** and **less than cumulatively considerable** impact relative to this topic.

Impact 4.27: Cumulative Impact on Stormwater Facilities (Less than Significant and Less than Cumulatively Considerable)

The proposed Project includes development of a new storm drainage system to serve the Master Plan area. The construction of the new on-site stormwater drainage facilities, which are associated with future buildout of the Project, has the potential to cause environmental impacts. The potential for environmental impacts associated with the installation of the stormwater system, and all construction activities within the Master Plan area, are addressed throughout this EIR. In some cases, the direct and indirect impacts are potentially significant and warrant mitigation measures, while in other cases there are significant and unavoidable impacts. The future storm drainage infrastructure would fall within the range of environmental impacts disclosed in this EIR and would be subject to relevant mitigation measures included in this EIR. All mitigation measures presented throughout this EIR will be implemented to reduce impacts to the extent practicable. There will not be any significant impacts beyond what is disclosed in the other chapters of this document. In addition to the other mitigation measures presented throughout this document, the storm drainage plan is intended to ensure that the drainage system is designed and constructed to meet the City's performance standards. The plan will include an engineered storm drainage plan that demonstrates attainment of pre-Project runoff requirements prior to discharge and describes the treatment controls used to reach attainment consistent with the City's performance standards. With the design and construction of flood control improvements included in the proposed storm drainage system in accordance with Fresno Metropolitan Flood Control District requirements, in addition to all existing regulations, standards and specifications, development of the proposed Project would have a **less than significant** and **less than cumulatively considerable** impact relative to this topic.

Impact 4.28: Cumulative Impact on Solid Waste Facilities (Less than Significant and Less than Cumulatively Considerable)

New residential and non-residential land uses proposed in the Development Area of the Project site would increase the amount of solid waste generated when compared to existing conditions. Increased growth and development associated with Project implementation would result in an

increase of solid waste disposal to transfer stations and landfills and could contribute to an increased demand for solid waste services throughout the City.

The Clovis Landfill has a remaining capacity of 7.7 million cubic yards as of 2012, is permitted a maximum throughput of 2,000 tons per day (TPD) and has enough projected capacity to serve residents and businesses until approximately 2047. Fairmead Solid Waste Disposal Site has a remaining capacity of 5.6 million cubic yards as of 2004, is permitted a maximum throughput of 1,100 TPD, and has enough projected capacity to serve residents and businesses until approximately 2028. American Avenue Disposal Site has a remaining capacity of 29.4 million cubic yards as of 2005, is permitted a maximum throughput of 2,200 TPD, and has enough projected capacity to serve residents and businesses until approximately 2031. Avenal Regional Landfill has a remaining capacity of 28.9 million cubic yards as of 2020, is permitted a maximum throughput of 6,000 TPD, and has enough projected capacity to serve residents and businesses until approximately 2056. Conservatively assuming the Clovis Landfill reaches full capacity, the Fairmead Solid Waste Disposal Site, American Avenue Disposal Site, or Avenal Regional Landfill would have adequate capacity to accommodate the Project's projected solid waste generation. Further, it is more likely that future solid waste would be distributed to several landfills serving the City. Therefore, the City's projected increase in solid waste generation associated with future buildout of the proposed Project is expected to be within the permitted capacities of landfills utilized by the City.

The Master Plan includes residential development of up to 3,286 units and may increase the City's population by approximately 9,333 residents (based on the Department of Finance estimates of 2.84 persons per household for 2023). The City of Clovis achieved a disposal rate of 4.4 pounds per day per resident in 2022. Assuming these disposal rates remain constant throughout the life of the Project, the Project would result in a net increase of approximately 40,198.4 pounds per day of solid waste over existing conditions, which equals 20.1 net tons per day or 7,336.5 net tons of solid waste per year. In addition, the Project includes non-residential development, including a mixed-use neighborhood commercial center designed to provide localized retail and service uses and employment to the Project area and local surrounding areas, a mini storage site approved for development by the County of Fresno, an elementary school, and community recreation centers serving the community. While these uses would generate solid waste, solid waste generation associated by non-residential uses is anticipated to be insignificant in comparison to the proposed residential uses.

All development within the City, including the Project, would be required to comply with waste reduction and recycling requirements, including Chapter 6.3 of the Clovis Municipal Code, that aim to reduce the amount of solid waste being diverted to the landfill. Therefore, the City's projected increase in solid waste generation associated with future buildout of the proposed Project is expected to be within the permitted capacities of landfills utilized by the City. Through the implementation of existing regulations and compliance with the Clovis General Plan and Municipal Code, the Project would comply with regulations related to solid waste and would not exceed the permitted capacity of the landfill serving the City. Additionally, based on the estimated closure dates of the landfills serving the City, development under the proposed Project would not result in a

significant impact on landfill capacity. This is a **less than significant** impact. Thus, impacts related to solid waste facilities would be a **less than cumulatively considerable contribution**.

Impact 4.29: Cumulative Impact from Electrical, or Telecommunications Facilities (Less than Significant and Less than Cumulatively Considerable)

Electrical services are provided by PG&E; phone, provided by AT&T; cable, provided by Comcast; and related internet services would be extended to all portions of the Master Plan area from existing facilities located along East Shepherd Avenue and from existing residential development surrounding the Master Plan area. PG&E and AT&T operate and maintain transmission and distribution infrastructure in the Project area. Proposed utilities would be located within public utility easements to be dedicated along street frontages. Although the proposed Project would increase demand for electricity, and telecommunications facilities, utility improvements would be installed in conjunction with planned street improvements. Although the Project would require construction of new electrical facilities within the site, these improvements would be limited to connections to existing facilities near the Project site. The potential environmental effects associated with construction and operation of the proposed Project, including the installation of the proposed electrical improvements in the roadway rights-of-way to serve the proposed development, are analyzed throughout this EIR under each environmental topical area. The proposed Project would not result in the relocation or construction of new or expanded electrical, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. This is a **less than significant** impact. Thus, impacts related to solid waste facilities would be a **less than cumulatively considerable contribution**.

4.2 SIGNIFICANT IRREVERSIBLE EFFECTS

LEGAL CONSIDERATIONS

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), require that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action, should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed Project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Consumption of Nonrenewable Resources

Consumption of nonrenewable resources refers to the loss of physical features within the natural environment, including the conversion of agricultural lands, loss of access to mining reserves, and nonrenewable energy use. The Project site has nonrenewable resources, including biological resources and agricultural resources.

As discussed in Section 3.4, Biological Resources, the proposed Project would result in impacts to special-status species and their habitats and to jurisdictional wetlands/waters. However, all potentially significant impacts related to biological and jurisdictional resources would be reduced to less than significant levels through implementation of the mitigation measures identified in Section 3.4, which provide a mechanism to ensure that impacts on these nonrenewable resources are minimized and avoided to the extent feasible, and are compensated consistent with applicable regulatory requirements where avoidance is not possible.

Nonrenewable agricultural resources such as agricultural land, farmland, and agricultural soils, would be converted during the construction and operation of the Project. The City's General Plan includes a variety of policies that seek to conserve and protect agricultural resources. These include policies that encourage the development of vacant lands within City boundaries prior to conversion of agricultural lands and ensure that urban development near existing agricultural lands will not unnecessarily constrain agricultural practices or adversely affect the economic viability of nearby agricultural operations. Nevertheless, as discussed in Section 3.2, Agricultural Resources, impacts related to the conversion of Important Farmland were evaluated using the LESA Model and determined to be less than significant.

Irretrievable Commitments/Irreversible Physical Changes

Development of the proposed Project would result in irretrievable commitments by introducing development onto the site which is presently undeveloped. The conversion of agricultural lands to urban uses would result in an irretrievable loss of agricultural land, wildlife habitat, and open space.

A variety of resources, including land, energy, water, construction materials, and human resources would be irretrievably committed for development and infrastructure installation associated with development and operation of the proposed Project. Buildout of the Project would require the commitment of a variety of other non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt, petrochemicals, and metals.

Additionally, a variety of resources would be committed to the ongoing operation and life of the Project. The introduction of new residential and park uses to the Project site will result in an increase in energy demand associated with building operations, vehicle travel, equipment operation, and other activities. Fossil fuels are the principal source of energy and the Project will increase consumption of available supplies, including gasoline and diesel fuel. These energy resource demands relate to initial construction, operation, maintenance and the transport of people and goods to and from the Project site that would occur with development of the proposed Project.

Additionally, development will physically change the environment in terms of aesthetics, air emission, noise, traffic, open space, and natural resources. These physical changes are irreversible after development occurs.

MANDATORY FINDINGS OF SIGNIFICANCE

CEQA Guidelines Section 15065 states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects that are individually limited, but cumulatively considerable. As defined in CEQA Guidelines Section 15065(a)(3), cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Cumulative impacts are addressed previously in Section 4.1 for each of the environmental topics.

CEQA Guidelines Section 15065(a)(1) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to (1) substantially reduce the habitat of a fish or wildlife species; (2) cause a fish or wildlife population to drop below self-sustaining levels; or (3) substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Additionally, as required by CEQA Guidelines Section 15065(a)(4), a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. There are no significant and unavoidable impacts related to substantial adverse effects on plant, fish, or wildlife species, their habitats, or their ranges.

Substantial Adverse Effects on Fish, Wildlife, and Plant Species

Section 3.4 (Biological Resources) of this Draft EIR fully addresses any impacts that might relate to the reduction of the fish or wildlife habitat, the reduction of fish or wildlife populations, and the reduction or restriction of the range of special-status species because of Project development. As described in the EIR, there are impacts to species, including their habitats, but the impacts are being avoided to the extent possible, and unavoidable losses as well as long-term decreased utility of the habitat that remains in place would be compensated through the state and federal permit mechanisms enforced through Mitigation Measures 3.4-3, 3.4-6, and 3.4-7. With these measures in place, impacts on species due to development are expected to be less than significant.

4.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated, but not reduced to a level of insignificance. The following significant and unavoidable impacts of the proposed Project are discussed in Sections 3.3, and 3.13, and previously in this chapter (cumulative-level). Refer to those

discussions for further details and analysis of the significant and unavoidable impact identified below:

- Impact 3.3-1: Project operation has the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan;
- Impact 3.13-1: Project development would result in VMT increases that are greater than 87 percent of Baseline conditions;
- Impact 4.5: Under cumulative conditions, the Project would result in an impact on the region's air quality; and
- Impact 4.20: Under Cumulative conditions, Project development would result in VMT increases that are greater than 87 percent of Baseline conditions.

5.1 CEQA REQUIREMENTS

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) analyze a reasonable range of feasible alternatives that meet most or all project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined, but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

PROJECT OBJECTIVES

The project objectives include a collection of goals and objectives, which clearly define the purpose of the Project. In developing the project objectives, it is notable that the City considered the Legislature's repeated determinations in recent years that California is facing a statewide housing crisis, and it is clearly within a city's exercise of its legislative discretion to facilitate the construction of new housing, which is defined by the Project Description after thorough evaluation of the development potential. Government Code section 65889.5, subdivision (a)(1)(A), states that "[t]he lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." Subdivision (a)(1)(D) of that section adds that "[m]any local governments do not give adequate attention to the economic, environmental, and social costs of decisions that result in disapproval of housing development projects, reduction in density of housing projects, and excessive standards for housing development projects."

The principal objective of the proposed Project is the expansion of the City's SOI to include the Project site, annexation, master planning, and subsequent development of land to accommodate growth. The City has established several additional project goals and objectives that more fully inform the Project purpose. These Project goals and objectives are as follows:

- Expand the City's SOI in an area contemplated by the City General Plan to establish a logical and orderly boundary that promotes the efficient extension of municipal services to areas planned for growth.
- Undertake Master Planning as a long-range planning tool to guide development within areas designated for growth under the City of Clovis General Plan.
- Provide residential housing opportunities that are visually attractive and accommodate the future housing demand in Clovis.
- Refine the mixture of housing types, sizes and densities that collectively provide for local and regional housing demand.
- Provide infrastructure that meets City standards and is integrated with existing and planned facilities and connections.
- Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet City standards.

- Develop a strong pedestrian network that links activities, recreational amenities, local commercial uses and neighborhoods together.
- Establish neighborhood designs that consider safety and security of citizens.
- Consider affordability and housing diversity by developing residential uses that are proximate to urban services and roadways and varied in size and density.
- Embrace the natural resources and views of the Sierra Nevada Mountain range.

The primary Project objective, and the supporting goals presented above, were developed by the City in response to the Legislature's repeated determinations in recent years that California is facing a statewide housing crisis, and the City's desire to facilitate the construction of new housing in the face of the housing crisis. The City staff has responded with adequate attention to the economic, environmental, and social costs of reduced housing density by establishing a quantified target density that provided the City with significant flexibility to evaluate different scenarios for residential projects on the Project site while also considering the critical need for additional housing. The quantifiable target guided a site plan that allows for development of up to 3,286 residential units, approximately 16 acres of commercial/mixed-uses, approximately 19 acres for an elementary school site, approximately 32 acres for mini-storage, and approximately 59 acres of parks, trails and preserved open space. The site plan also includes the installation of new public and private roadways that will provide pedestrian and vehicular access to the Project site and surrounding community areas, and other improvements, including water supply, storm drainage, sewer facilities and landscaping to serve the residential uses.

ALTERNATIVES NOT SELECTED FOR FURTHER ANALYSIS

A Notice of Preparation (NOP) was circulated to the public to solicit recommendations for a reasonable range of alternatives to the proposed Project. Additionally, a public scoping meeting was held during the public review period to solicit recommendations for a reasonable range of alternatives to the proposed Project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review process.

The City of Clovis considered alternative locations early in the public scoping process. The City's key considerations in identifying an alternative location were as follows:

- Is there an alternative location where significant effects of the Project would be avoided or substantially lessened?
- Is there a site available within the City's Sphere of Influence with the appropriate size and characteristics such that it would meet the basic Project objectives?

The City's consideration of alternative locations for the Project included a review of previous land use planning and environmental documents in Clovis, including the General Plan. The search included a review of land in Clovis that is located within the Sphere of Influence, suitable for development, available for acquisition, and not already approved or pending development. It was found that there are numerous approved projects and proposed projects that are currently under review in Clovis. These approved and proposed projects are not available for acquisition by the Project applicant and are not considered a feasible alternative for the Project applicant. The City

has found that there are no feasible alternative locations that exist within the City's Sphere of Influence with the appropriate size and characteristics that would meet the basic Project objectives and avoid or substantially lessen a significant effect. For these reasons, the City of Clovis determined that there are no feasible alternative locations.

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

Four alternatives to the proposed Project were developed based on input from City staff. The alternatives that are anticipated to be analyzed in the EIR include the following four alternatives in addition to the proposed Project.

- **No Project (No Build) Alternative**: Under this alternative, development of the Project site would not occur, and the Project site would remain in its current existing condition.
- **Increased Density Alternative:** Under this alternative, there would be upzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to higher densities to accommodate a 10 percent increase in residential units. The total unit count would increase from 3,286 under the proposed Master Plan to a total of 3,615 under the Increased Density Alternative. The SOI expansion of the entire Project would still occur, but there would be no planned development of uses or infrastructure in the SOI expansion area.
- **Reduced Density Alternative:** Under this alternative, there would be downzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to very low residential density. The total unit count would decrease from 3,286 under the proposed Master Plan to a total of 854 under the Reduced Density Alternative.
- **Reduced Sphere of Influence Alternative:** Under this alternative, the proposed Project would only expand the SOI and annex the proposed Master Plan area, and it would exclude the 445-acre SOI expansion outside of the proposed Master Plan. It is noted, however, that the reduction in the SOI would eliminate that possibility of the Non-Development Area connecting to City services at some point in the future, if desired by those residents.

NO PROJECT (NO BUILD) ALTERNATIVE

Under the No Project (No Build) Alternative development of the Project site would not occur, and the Project site would remain in its current existing condition. It is noted that the No Project (No Build) Alternative would fail to meet the Project objectives.

INCREASED DENSITY ALTERNATIVE

Under the Increased Density Alternative, there would be upzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to higher densities to accommodate a 10 percent increase in residential units. The total unit count would increase from 3,286 under the proposed Master Plan to a total of 3,615 under the Increased Density Alternative. The increased unit count would be accommodated by decreasing lot sizes. The other components of the proposed Project, including

commercial, community recreational, and parks and recreation, would be identical under this alternative. The developable acreage would be identical to the proposed Project.

The SOI expansion of the entire Project would still occur, but there would be no planned development of uses or infrastructure in the SOI expansion area.

REDUCED DENSITY ALTERNATIVE

Under the Reduced Density Alternative, there would be downzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to very low residential density. The total unit count would decrease from 3,286 under the proposed Master Plan to a total of 854 under the Reduced Density Alternative. The other components of the proposed Project, including commercial, community recreational, and parks and recreation, would be identical under this alternative.

The SOI expansion of the entire Project site would still occur, but there would be no planned development of uses or infrastructure in the SOI expansion area.

REDUCED SPHERE OF INFLUENCE ALTERNATIVE

Under this alternative, the proposed Project would only expand the SOI and annex the proposed Master Plan area, and it would exclude the 445-acre SOI expansion outside of the proposed Master Plan. The components of the proposed Project, including residential, commercial, community recreational, and parks and recreation, would be identical under this alternative. It is noted, however, that the reduction in the SOI would eliminate that possibility of the Non-Development Area connecting to City services at some point in the future, if desired by those residents.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR. Following the analysis of each alternative, Table 5.0-1 summarizes the comparative effects of each alternative.

NO PROJECT (NO BUILD) ALTERNATIVE

Aesthetics and Visual Resources

The No Project (No Build) Alternative would leave the Project site in its existing state and would not result in increases in daytime glare or nighttime lighting. The visual character of the Project site would not change under this alternative compared to existing conditions.

As described in Section 3.1, development of the proposed Project changes the visual character of the Project site, as it would convert the approximately 507-acre Master Plan area from its existing use, which consists of a combination of fallow and grazing land, several rural residences, offices for Contractor's Corp Yard and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described above, in addition to supporting roadways, utilities and infrastructure, new curbs and

gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses. These impacts related to a change in visual character may be considered "attractive" to one viewer and "unattractive" to other viewers. It is noted that the Clovis General Plan EIR concluded that adoption of the General Plan, which contemplated urbanization of the agricultural lands within the General Plan study area, was a less than significant impact.[1]

There are no designated State Scenic Highways in the vicinity of the Project site. No officially designated State scenic highways are located in the City of Clovis. The nearest "eligible" State Scenic Highway to the City is SR 168, which is located over one mile to the south of the Project site at its closest point. Additionally, there are no "eligible" highway segments in the Project vicinity that may be included in the State Scenic Highway system.

The proposed Project would be required to implement existing City regulations aimed at reducing light and glare impacts to ensure that no unusual daytime glare or nighttime lighting is produced. Specifically, the Clovis Development Code states that direct glare shall not be permitted and provides standards for nuisance prevention and shielding requirements. Section 9.22.050 of the Clovis Development Code contains standards and provisions related to exterior lighting. While implementation of regulations and standards within the Clovis Development Code would reduce impacts associated with increased light and glare, the impacts would not be eliminated entirely, and the overall level of light and glare in the Project site would increase in general as urban development occurs. All proposed outdoor lighting is required to meet applicable City standards regulating outdoor lighting, including 9.22.050 Exterior light and glare of the City's Development code, to minimize any impacts resulting from outdoor lighting on adjacent properties. Implementation of the existing City standards would reduce potential impacts associated with nighttime lighting and light spillage onto adjacent properties to a less than significant level.

Overall, the proposed Project would not substantially impact the visual character or quality of the Project site or its surroundings, damage scenic resources within a State Scenic Highway, or potentially significant new sources of light and glare. The No Project (No Build) Alternative would avoid these less than significant impacts altogether, as there would be no development on the Project site. As such, this alternative would have no impact with respect to aesthetics, and this impact would be reduced when compared to the proposed Project.

Agricultural Resources

Development of the proposed Project would result in the permanent conversion of approximately 476.24 acres of Farmland of Local Importance, as designated by the California Department of Conservation on the June 2020 Important Farmlands Map and as shown on Figure 3.2-1, to nonagricultural use. After looking at site-specific characteristics more closely for the Project site, it is noteworthy that the Department of Conservation's designations do not accurately and fully consider site specific characteristics such as the lack of any irrigation or crop production on the

[1] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

Project site. To reconcile these facts and analyze the site-specific characteristics more fully, the Clovis General Plan calls for the use of the Land Evaluation and Site Assessment (LESA) to evaluate the significance of the agricultural conversion. It is noted that the LESA model was developed by the Department of Conservation, which is the same agency that published the Important Farmland's Map. The proposed Project has a sub score of 25.44 for the Land Evaluation and a sub score of 15 for the Site Assessment, which means the conversion of the land on the Project site is not considered significant according to the California Department of Conservation's established thresholds.

There is one parcel within the Non-development area under a Williamson Act contract. This parcel is not anticipated for any development and no conflict would occur from project approval. There are two parcels within the Master Plan Area with an active Williamson Act contract. The parcels are located within Planning Area (PA) 29. These parcels total 34.17 acres and are part of MPArea 2, which is not anticipated for immediate development. MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan, but these areas would be required to have a project-level CEQA analysis when the property owners decide to develop the parcels. Immediate development would have the potential for a conflict because the Williamson Act contract is in effect, however, immediate development is not anticipated for the parcels under a Williamson Act. A Williamson Act contract is a voluntary agreement and the cancellation process is defined in *Williamson Act Cancellation Process, Guide for Local Governments* (California Department of Conservation 2022). The process can involve a filing of non-renewal and a lapse of the appropriate time, or a standard cancellation with a fee assessment.

The No Project (No Build) Alternative would result in no development on the Project site. As such, this alternative would have no impact on agricultural land. As such, this impact would be reduced when compared to the proposed Project.

Air Quality

To achieve attainment with the standards, the SJVAPCD has established thresholds of significance for criteria pollutant emissions. Projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan."

CalEEMod™ (v.2022.1) was used to model operational emissions of the proposed Project. The SJVAPCD has established their thresholds of significance by which the Project emissions are compared against to determine the level of significance. If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for operational-generated emissions, the proposed Project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions to the extent feasible. As shown in Table 3.3-8, the unmitigated operational emissions would exceed the SJVACPD operational thresholds of significance for CO, NOx, ROG, and PM_{10}. Based on this, mitigation measures are required to be implemented to reduce CO, NOx, ROG, and PM_{10} emissions. With implementation of the available feasible mitigation measures (Mitigation Measures 3.3-1 through 3.3-4), the proposed Project's emissions would be reduced. As shown in Table 3.3-9, the Project's CO emissions could be

reduced to approximately 158.0 tons per year, NOx emissions could be reduced to approximately 28.1 tons per year, and ROG emissions could be reduced to approximately 44.4 tons per year, with the implementation of Mitigation Measures 3.3-1 through 3.3-3.Mitigation Measure 3.3-4 provides for a requirement to reduce emissions to the established Air District thresholds through a variety of options including Rule 9510 Indirect Source Review, a VERA, or another method that can be shown to reduce or offset emissions. The quantity of emission reductions needed for the entire project is 58 tons/year of CO, 18.1 tons/year of NOx, 34.4 tons/year of ROG, and 27.2 tons/year of PM_{10}. However, even with implementation of Mitigation Measures 3.3-1 through 3.3-5, emissions reductions may not be sufficient to ensure a reduction of CO, NOx, ROGs, and PM_{10} to below the applicable Air District criteria pollutant thresholds, as shown in Table 3.3-9.

As shown in Table 3.3-11, Project maximum construction emissions is not expected to exceed the SJVAPCD thresholds of significance with the implementation of existing rules and regulations.

The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements, as well as implement the control measures provided by the SJVAPCD for construction-related PM_{10} emissions. Nevertheless, the Project's criteria pollutant emissions would be considered to have a significant and unavoidable impact.

The Project would not be exposed to substantial nearby sources of TACs and would not generate a significant risk of public exposure to TACs.

Under the No Project (No Build) Alternative, the Project site would not be developed, and there would be no net change in emissions and no potential for a conflict with any adopted plans or policies related to air quality. As such, this impact would be reduced when compared to the proposed Project.

Biological Resources

As described in Section 3.4, Biological Resources, construction in the Project site has the potential to result in impacts to special-status species in the region. The Project site provides potential habitat for several species, and some are known to exist in the immediate area, including those discussed in Section 3.4. Implementation of Mitigation Measures 3.4-1 through Mitigation Measure 3.4-17 in Section 3.4 would reduce potentially cumulative impacts to a less than significant level.

Under the No Project (No Build) Alternative, the proposed Project would not be constructed, no habitat would be removed and no ground disturbing activities would occur. As such, this impact would be reduced when compared to the proposed Project.

Cultural and Tribal Resources

The Development Area is not located in an area known to have historical and archaeological resources. However, the Cultural Resources Report concludes that there is a moderate potential for buried pre-contact archaeological sites within the Development Area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown historical and archaeological resources. Implementation Mitigation Measure

3.5-1 would ensure that this impact is less than significant. Additionally, while no human remains were found during field surveys of the Project site, implementation of the Mitigation Measure 3.5-1 would ensure that all construction activities, which inadvertently discover human remains implement state-required consultation methods to determine the disposition and historical significance of any discovered human remains. Implementation of Mitigation Measure 3.5-1 would ensure that the potential impact to disturb human remains, including those interred outside of formal cemeteries to a less than significant level.

The No Project (No Build) Alternative would result in no ground disturbing activities related to the proposed Project and would not have the potential to disturb or destroy cultural, historic, archaeological, or tribal resources. While the proposed Project is not anticipated to result in significant impacts to cultural resources with mitigation, the No Project (No Build) Alternative would result in less potential for impacts to cultural resources as the entire Project site would continue to be as currently developed. As such, this impact would be reduced when compared to the proposed Project.

Geology and Soils

As discussed in Section 3.6 Geology and Soils, the Project site does not have a significant risk of becoming unstable as a result landslide, subsidence, soil collapse, liquefaction, liquefaction induced settlement, or lateral spreading. The Project site has a low risk of seismic-related ground failure because of liquefaction. Landslide potential on the Project site is also low to non-existent. While the City is not within an area known for its seismic activity, there will always be a potential for ground shaking caused by seismic activity anywhere in California, including the Project site. Seismic activity could come from a known active fault in the region. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Additionally, the City of Clovis has incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

Septic tanks or septic systems are not proposed as part of the Project and would not be installed to serve the Master Plan. The Master Plan area would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines.

The Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are existing regulatory requirements.

The Project site is not expected to contain subsurface paleontological resources, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities. Implementation of Mitigation Measure 3.6-1 would ensure steps would be taken to reduce impacts to paleontological resources in the event that they are discovered during

construction, including stopping work in the event potential resources are found, evaluation of the resource by a qualified paleontologist and appropriate handling of any potential resource. This mitigation measure would reduce this impact to a less than significant level.

There are no past or current commercial mining operations within the Project site. Development of the proposed Project would have a less than significant impact relative to this topic.

Under the No Project (No Build) Alternative, the proposed Project would not be constructed, and no ground disturbing activities would occur. As such, this impact would be reduced when compared to the proposed Project.

Greenhouse Gases, Climate Change and Energy

As presented in Table 3.7-3 in Section 3.7, short-term construction emissions of GHGs are estimated at a maximum of approximately 10,367 MT CO_2e per year. As shown in Table 3.7-4, the annual GHG emissions associated with the proposed Project would be approximately 53,518 MT CO_2e under the unmitigated scenario, and 52,051 MT CO_2e under the mitigated scenario (i.e., with implementation of the mitigation measures provided in Section 3.3: Air Quality of the Draft EIR). The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS.

The proposed Project would use energy resources for the operation of Project buildings (electricity), outdoor lighting (electricity), for on-road vehicle trips (e.g., gasoline and diesel fuel) rerouted by the proposed Project and from off-road and on-road construction activities associated with the proposed Project (e.g., diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through statewide and local measures.

The proposed Project would be in compliance with all applicable federal, State, and local regulations regulating energy usage. For example, PG&E, the electric provider to the proposed Project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide RPS to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. PG&E has achieved at least a 33 percent mix of renewable energy resources in 2020 and is on track to achieve 60 percent mix of renewable energy by 2030. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

Under the No Project (No Build) Alternative, the proposed Project would not be constructed, and no construction or operational activities would occur. As such, this impact would be reduced when compared to the proposed Project.

Hazards and Hazardous Materials

Site Assessment: Based on the findings of the Phase I ESA and subsequent research and interviews, there was no evidence of controlled recognized environmental conditions (RECs)or historical RECs in connection with the site, as defined by ASTM E 1527-13; however, RECs, American Society for Testing Materials (ASTM) Non-Scope issues and site development issues were identified. However, Section 3.8, Hazards and Hazardous Materials, includes mitigation measures to ensure any impacts related to the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Overall, proposed Project would have a less than significant impact with regards to this environmental issue.

Construction Phase: Further, construction workers and the general public could be exposed to hazards and hazardous materials because of improper handling or use during construction activities (particularly by untrained personnel); transportation accidents; or fires, or other emergencies. Construction workers could also be exposed to hazards associated with accidental releases of hazardous materials, which could result in significant impacts to the health and welfare of people and/or wildlife. Additionally, an accidental release into the environment could result in the contamination of water, habitat and countless resources. Compliance with existing regulatory requirements of the Regional Water Quality Control Board would require the preparation of a project specific Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is required to include project specific best management measures that are designed to control erosion and the loss of topsoil to the extent practicable using best management practices (BMPs) that the RWQCB has deemed effective in controlling erosion, sedimentation and runoff during construction activities.

The proposed Project would also be required to comply with regulations on the transportation of hazardous materials codified in 49 CFR 173 and 49 CFR 177 and CCR Title 26, Division 6. These regulations, which are under the jurisdiction of Caltrans and the California Highway Patrol (CHP), provide specific packaging requirements, define unacceptable hazardous materials shipments, and prescribe safe-transit practices by carriers of hazardous materials. Compliance with these regulations would reduce the risk of exposure to humans and the environment related to the transportation of hazardous materials.

Construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to, CCR Titles 8 and 22, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; and construction vehicles shall be inspected daily for leaks. Off-site activities (e.g., utility construction) would also be required to comply with these regulations. These regulations and codes must be implemented, as appropriate, and are monitored by the State and/or local jurisdictions, including the FCEHS.

Contractors would be required to comply with Cal-EPA's Unified Program; regulated activities would be managed by FCEHS, the designated Certified Unified Program Agency for Fresno County,

in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California UFC hazardous material management plans and inventories).

Overall, consistency with federal, State, and local laws and regulations related to the handling of hazardous materials discussed above and implementation of Mitigation Measures 3.8-1 and 3.8-2 would ensure that these potential impacts are reduced to a less than significant level.

Operational Phase: The operational phase of the proposed Project will occur after construction is completed and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes the development of residential structures, which may need to utilize a variety of hazardous materials commonly found in urban areas, including paints, insecticides, detergents, cleaners, and cleaning solvents. If handled appropriately and in compliance with applicable regulations, these materials do not pose a significant risk.

Airports: There are no documented public airports or public use airports within proximity to the Project site.

Emergency Evacuation and Wildfire: In Fresno County, all major roads are available for evacuation, depending on the location and type of emergency that arises. The proposed Project does not include any actions that would impair or physically interfere with any of Fresno County's emergency plans or evacuation routes. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder the emergency vehicle access or evacuation in the event of an emergency. Any construction project that could involve road closures, traffic detours and congestion, shall be required to obtain traffic control plans approved by the City as the lead agency.

The Project site is not categorized as a "Very High" FHSZ by CalFire. The Project site is not located within an LRA and is categorized as Urban Unzoned or Non-Wildland/Non-Urban. The Project site is located in an area that is predominately single-family residential uses, which do not pose a significant risk of wildfire.

Under the No Project (No Build) Alternative, no new land uses would be introduced to the Project site, and the potential for hazardous material release on the Project site would be eliminated. As such, this impact would be reduced when compared to the proposed Project.

Hydrology and Water Quality

Construction: In accordance with the NPDES Stormwater Program, the Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and the existing regulatory requirements. Further, the Project would be required to incorporate appropriate erosion and sediment control measures per Section 9.110.040 of the City's Municipal Code and adhere to the City's landscape standards designed to reduce runoff and control soil erosion. Compliance with the Construction General Permit and applicable City grading

regulations would ensure that the proposed Project would have a less than significant impact relative to this topic.

Operational: The long-term operations of the proposed Project could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious areas associated with roadways, driveways, and residential structures. The Project site will include construction of a new storm drainage system, which will conform to applicable standards and requirements. The storm drainage collection and detention system will be subject to the State Water Resources Control Board Requirements (SWRCB), the Fresno Metropolitan Flood Control District (FMFCD), and City of Clovis regulations, standards, and specifications. This includes, but not limited to, the municipal NPDES storm water discharge permit, as well as any City required Best Management Practices to control the volume, rate, and potential pollutant load of storm water runoff. BMPs will be implemented through the SWPPP program and compliance with existing standards and rules, including the implementation of BMPs, would ensure that the proposed Project would have a less than significant impact relative to this topic.

Infiltration/Natural Recharge: The proposed Project would result in new impervious surfaces within the Master Plan area, which could reduce rainwater infiltration and groundwater recharge compared to existing conditions. However, the Project would include open space areas, including landscaped areas and 43 acres of parks, trails, and open space within MPArea 1, which would remain largely pervious. This includes the portion of Big Dry Creek Reservoir Outlet Works Channel that runs through the Project site. Further, areas developed with impervious surfaces would route stormwater into the proposed Project's storm drainage system and to FMFCD facilities designed to retain and infiltrate groundwater, eventually discharging to irrigation canals, creeks, and the San Joaquin River. Furthermore, the City documents the sustainable amount of groundwater that can be extracted from year to year and replenished through naturally occurring groundwater recharge. The City will continue to increase its surface water and recycled water supply usage to a point where groundwater extraction is less than the sustainable yield in a normal year. Therefore, while the proposed Project would result in an increase in the amount of impervious surfaces within the Project site when compared to existing conditions, it is not anticipated that the proposed development would interfere substantially with groundwater recharge.

Stormwater Quality: Stormwater quality standards imposed and monitored by the Environmental Protection Agency (EPA) and the SWRCB through the NPDES permit require treatment of stormwater runoff prior to its release into drainage features. Stormwater quality is an integral part of FMFCD's stormwater management system. With the design and construction of flood control improvements included in the proposed storm drainage system in accordance with FMFCD's requirements, the proposed Project would have a less than significant impact relative to this topic.

Flooding: Most of the Project site is located within an area of minimal flood hazard. A portion of the Project site is located within the 500-year flood zone and a portion of the Project site, within the Big Dry Creek Reservoir Outlet Works Channel (a man-made channel), is within the 100-year flood zone. The portion of the Project site within the 100-year flood zone (associated with Big Dry Creek Reservoir Outlet Works Channel) runs in a southwesterly direction through the center of

the Development Area. There are no areas of proposed development within the Project site that are designated as having an increased flood risk due to levee, nor are any these areas located within a regulatory floodway.

Additionally, as discussed in Chapter 3.9-4 of this EIR, the proposed Project is not anticipated to risk release of pollutants due to project inundation, including flooding because of the failure of a levee or dam, seiche, or tsunami. The Project site is approximately 118 miles from the coastline of the Pacific Ocean, which is sufficiently distant to preclude effects from a tsunami. Given the low risk of earthquake-induced seiche and the low water levels of the dam, risks of seiches to the Project site would be low. Furthermore, dam failure is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

The No Project (No Build) Alternative would result in no development on the Project site. As such, this alternative would have no impact on hydrology and water quality. As such, this impact would be reduced when compared to the proposed Project.

Land Use, Population, and Housing

The Project site is located directly north of the City of Clovis limit line and is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land, and open space land uses. The Project site would result in an extension of developed uses within an area of the City that currently has approved development plans within the vicinity of the Project site. The Project would provide roadways and pedestrian pathways to connect the Project site to the existing circulation system and to allow access to and from the site. Development of the Project site would not result in physical barriers, such as a highway, wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing and planned developments. The proposed Project would have a less than significant impact regarding the physical division of an established community. The proposed Project would not displace substantial numbers of people or existing housing.

Implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect.

The proposed infrastructure improvements would be adequately sized to serve the proposed Project only. The proposed infrastructure would not be oversized to accommodate any growth beyond the Project site into areas that were not previously served. While the proposed Project will result in growth, it is not anticipated to significantly induce growth. Implementation of the proposed Project will have a less than significant impact relative to this topic.

Under the No Project (No Build) Alternative, no new land uses would be introduced to the Project site and the potential for land use conflicts would be eliminated. As such, this impact would be reduced when compared to the proposed Project.

Noise

When comparing existing plus Project levels to existing levels, Shepherd Avenue from Temperence Avenue to Locan Avenue has the potential for significant impact as the only roadway segment with an increase of more than three dB. This segment is in the City of Clovis. The Project will stay within the normally compatible range for single family residential; therefore, this would not be considered an impact.

The Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Residences along Shepherd Avenue will be exposed to levels up to 69.4 dBA CNEL at the property line. These are within the normally compatible levels for residential uses, but above the exterior 65 dBA CNEL standard as outlined in Table ES-1 of the City of Clovis 2014 General Plan.

To meet the exterior residential standards of 65 dBA CNEL, the unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue must be shielded by six-foot sound walls. These walls must be at least 4.2 pounds per square foot (lbs/ft^2). Any unshielded residential glass facades within 80 feet of the centerline of Shepherd Avenue or Sunnyside Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.

The proposed Project would include typical residential noise sources which would be compatible with the adjacent existing residential uses (a.k.a. neighborhood traffic, yard equipment, truck deliveries, garbage collected, etc.). The Project's proposed park uses are located internal to the Project site and would not impact off-site residential uses.

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dBA CNEL, or less, will typically comply with the City of Clovis 45 dBA CNEL interior noise level standard. Therefore, this impact would be less than significant.

During the construction of the Project, including roads, water, sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the Project vicinity. Construction noise is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City of Clovis Municipal Code Section 5.27.604. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the Project vicinity.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Noise levels will be the loudest during the grading phase. The modeling assumes construction equipment as close as 25 feet from the adjacent residences and an average of 300 feet away from the adjacent residences. Unmitigated noise levels at 300 feet have the potential to reach 67 dBA L_{eq} and 93 dBA L_{max} at the nearest sensitive receptors during grading. Noise levels for the other construction phases would be lower, approximately from 53 to 66 dBA L_{eq} and 86 to 91 dBA L_{max}.

Noise reduction policies within the General Plan Noise Element and standards within the Municipal Code are provided to further reduce construction noise.

The construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer or other earthmoving/grading equipment, which is calculated to be below the vibration impact threshold.

The Project site is outside the Fresno Yosemite International Airport noise contours and there are no private airstrips, public airports, or public use airports within two miles of the Project site.

The No Project (No Build) Alternative would result in no development on the Project site. As such, this alternative would have no impact from noise. As such, this impact would be reduced when compared to the proposed Project.

Public Services and Recreation

The proposed Project will create an increased demand for public services such as police protection, fire services, school services, and recreation compared to existing conditions. To the extent that the Project would have an incremental increase in demand on public services, the Project would be required to pay the impact fees to assure that the current level of service goals of the City are met. Impact fees from new development are collected based upon projected impacts from each development. The adequacy of impact fees is reviewed periodically to ensure that the fee is commensurate with the service. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with police services.

The Project does not propose and would not create a need for new or physically altered public service facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, the Project would not result in adverse physical impacts associated with such facilities.

Although the Project's proposed new open space opportunities would bring the City closer to its goal of parkland for its future residents, it would not provide enough parkland needed to meet the four acres per 1,000 people standard. However, Municipal Code Chapter 3.04, Park Acquisition and Development, states that any developer who plans for dwelling units to be constructed in the City shall pay, in addition to any other fees required to be paid by the City, a fee which shall be calculated on the basis of park acreage designated in the Clovis General Plan consisting of the estimated total land acquisition and construction cost distributed on the basis of the remaining developable area within the sphere of influence. In accordance with the Municipal Code, fees are deposited in specific funds that shall be used solely for the acquisition, improvement and expansion of public parks and recreation facilities as outlined in the park acquisition and improvement fee update. Upon provision and dedication of the proposed parkland and/or payment of required fees in accordance with the Clovis Municipal Code Chapter

3.04, and other Municipal Code policies, the proposed Project will result in a less than significant impact.

The proposed Project would not significantly increase the use of an existing park, or other recreational facility. Therefore, it is not anticipated that any substantial physical deterioration of existing facilities would occur or be accelerated. As such, the proposed Project would have a less than significant impact relative to this topic.

The No Project (No Build) Alternative would result in no development on the Project site. As such, this alternative would have no impact on public services. As such, this impact would be reduced when compared to the proposed Project.

Transportation and Circulation

The Project vehicle miles traveled (VMT) per capita is approximately 116 percent higher than Fresno County's VMT per capita threshold and approximately 99 percent higher than the VMT per employee threshold. Project design features aim to promote overall mobility with the goal of reducing VMT and reducing GHG emissions. Implementation of these Project design features may possibly reduce the Project's VMT. The Project design features can help offset some of the VMT impacts of the Project. Because the development would generate vehicle travel exceeding 13 percent below the established regional average under Existing and Cumulative Conditions, even with implementation of Project Design measures that provide mitigating effects, development of the proposed Project would result in a significant and unavoidable impact.

The City of Clovis Active Transportation Plan (2022) and City of Clovis General Plan (2014) were reviewed to determine if the proposed Project results in any inconsistencies with adopted transportation related policies, and the Project is not anticipated to conflict with policies, plans, and programs addressing the circulation system for alternative modes.

Buildout of the proposed Master Plan would result in some changes to the City's circulation network in the vicinity of the project but would not increase hazards or incompatible uses due to design features. Roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, and would have to meet design guidelines such as the accessibility requirements of Title 24 (California Building Code), ADA and PROWAG standards, California Manual of Uniform Traffic Control Devices (MUTCD), and the Caltrans Roadway Design Manual. Therefore, development of the proposed Project would not result in a conflict with an existing or planned pedestrian facility, bicycle facility, or transit service/facility.

The No Project (No Build) Alternative would result in no development on the Project site. As such, this alternative would have no impact on traffic. As such, this impact would be reduced when compared to the proposed Project.

Utilities

The proposed Project would increase the amount of wastewater requiring treatment. According to the City's 2017 Wastewater Master Plan Update, single-family residential uses are estimated

to generate 55 gallons per capita per day or 175 gallons per day per equivalent dwelling unit (edu) for single family residential land uses and 142 gallons per day edu for multi-family residential units. The Project site includes up to 3,268 single- and multi-family residential units. Using the more conservative rate which assumes that the Project would only develop single-family residential uses, the proposed Project would generate approximately 575,050 gallons per day (or 0.575 mgd) of wastewater. Hydraulic modeling updates represent more flexibility in construction and unit types, which estimated the Project's average dry weather flow at approximately 0.513 mgd of wastewater. Occupancy of the proposed Project would be prohibited without sewer allocation. An issuance of sewer allocation from the City's available capacity would ensure that there would be a final determination by the wastewater treatment and/or collection provider that there is adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the Regional Water Reclamation Facility (RWRF) with a subsequent allocation of capacity to the proposed Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments.

The City of Clovis Water Reuse Facility is currently in compliance with the WDR requirements of Order No. 5-2019-0021 NPDES NO. CA0085235. The projected flows of the proposed Project are not expected to exceed the treatment capacity available for treatment. Full buildout of the proposed Project would slightly increase the existing treatment demand at the RWRF. As described above, the City must also periodically review and update their Utility Master Plans, including the Wastewater Master Plan, and as growth continues to occur within the City, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. These pre-existing proactive efforts ensure the City would be able to reliably treat the wastewater as the community expands its population up to and through the next plant expansion, including with development of the proposed Project.

A majority of the Master Plan has been planned for urban uses and is identified in the City's General Plan as being located within the Northeast Urban Center and specifically, within Focus Area 13. As such, the Master Plan has been anticipated for potential development. Given that projected wastewater generation volumes associated with the buildout of the Master Plan would not exceed the projected wastewater generation volumes described in the Wastewater Master Plan and the Urban Water Management Plan, as described under Impact 3.14-1. Development of the proposed Project would have a less than significant impact relative to this topic.

The wastewater collection and conveyance system that will serve the proposed Project will consist of engineered infrastructure consistent with the City's existing infrastructure requirements. New wastewater collection and conveyance infrastructure needed for the proposed Project will require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients. The applicant will refine the wastewater collection/conveyance infrastructure design through the development of improvements plans which undergo review by the Engineering Department to ensure consistency with the City's engineering standards. This improvement plan process will include full engineering design (i.e.

location, depth, slope, etc.) of all conveyance infrastructure as well as a review of new sewer pump stations and new force mains if needed. Ultimately, the sanitary sewer collection system will be an underground collection system installed as per the City of Clovis standards and specifications.

Therefore, the installation of the wastewater collection and conveyance system infrastructure to serve the proposed Project would have a less than significant impact relative to this topic. The wastewater treatment plant would not require upgrades or improvements in order to serve the proposed Project. Therefore, development of the proposed Project would have a less than significant impact relative to this topic.

The No Project (No Build) Alternative would result in no development on the Project site. As such, this alternative would have no impact on utilities. As such, this impact would be reduced when compared to the proposed Project.

INCREASED DENSITY ALTERNATIVE

Aesthetics and Visual Resources

As described in Section 3.1, development of the proposed Project changes the visual character of the Project site, as it would convert the approximately 507-acre Master Plan area from its existing use, which consists of a combination of fallow and grazing land, several rural residences, offices for Contractor's Corp Yard and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described above, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses. These impacts related to a change in visual character may be considered "attractive" to one viewer and "unattractive" to other viewers. It is noted that the Clovis General Plan EIR concluded that adoption of the General Plan, which contemplated urbanization of the agricultural lands within the General Plan study area, was a less than significant impact.[2]

There are no designated State Scenic Highways in the vicinity of the Project site. No officially designated State scenic highways are in the City of Clovis. The nearest "eligible" State Scenic Highway to the City is SR 168, which is located over one mile to the south of the Project site at its closest point. Additionally, there are no "eligible" highway segments in the Project vicinity that may be included in the State Scenic Highway system.

The proposed Project would be required to implement existing City regulations aimed at reducing light and glare impacts to ensure that no unusual daytime glare or nighttime lighting is produced. Specifically, the Clovis Development Code states that direct glare shall not be permitted and provides standards for nuisance prevention and shielding requirements. Section 9.22.050 of the Clovis Development Code contains standards and provisions related to exterior lighting. While

[2] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

implementation of regulations and standards within the Clovis Development Code would reduce impacts associated with increased light and glare, the impacts would not be eliminated entirely, and the overall level of light and glare in the Project site would increase in general as urban development occurs. All proposed outdoor lighting is required to meet applicable City standards regulating outdoor lighting, including 9.22.050 Exterior light and glare of the City's Development code, to minimize any impacts resulting from outdoor lighting on adjacent properties. Implementation of the existing City standards would reduce potential impacts associated with nighttime lighting and light spillage onto adjacent properties to a less than significant level.

Overall, the proposed Project would not substantially impact the visual character or quality of the Project site or its surroundings, damage scenic resources within a State Scenic Highway, or potentially significant new sources of light and glare.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site. This alternative would result in an increased residential density but, overall, it would not substantially impact the visual character or quality of the Project site or its surroundings, damage scenic resources within a State Scenic Highway, or potentially significant new sources of light and glare. As such, this impact would be largely equal when compared to the proposed Project.

Agricultural Resources

Development of the proposed Project would result in the permanent conversion of approximately 476.24 acres of Farmland of Local Importance, as designated by the California Department of Conservation on the June 2020 Important Farmlands Map and as shown on Figure 3.2-1, to nonagricultural use. After looking at site-specific characteristics more closely for the Project site, it is noteworthy that the Department of Conservation's designations do not accurately and fully consider site specific characteristics such as the lack of any irrigation or crop production on the Project site. To reconcile these facts and analyze the site-specific characteristics more fully, the Clovis General Plan calls for the use of the LESA to evaluate the significance of the agricultural conversion. It is noted that the LESA model was developed by the Department of Conservation, which is the same agency that published the Important Farmland's Map. The proposed Project has a sub score of 25.44 for the Land Evaluation and a sub score of 15 for the Site Assessment, which means the conversion of the land on the Project site is not considered significant according to the California Department of Conservation's established thresholds.

There is one parcel within the Non-development area under a Williamson Act contract. This parcel is not anticipated for any development and no conflict would occur from project approval. There are two parcels within the Master Plan Area with an active Williamson Act contract. The parcels are located within Planning Area (PA) 29. These parcels total 34.17 acres and are part of MPArea 2, which is not anticipated for immediate development. MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan, but these areas would be required to have a project-level CEQA analysis when the property owners decide to develop the parcels. Immediate development would have the potential for a conflict because the Williamson Act contract is in effect, however, immediate development is not anticipated for the parcels under

a Williamson Act. A Williamson Act contract is a voluntary agreement and the cancellation process is defined in *Williamson Act Cancellation Process, Guide for Local Governments* (California Department of Conservation 2022). The process can involve a filing of non-renewal and a lapse of the appropriate time, or a standard cancellation with a fee assessment.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site. This alternative would result in the same land conversion as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Air Quality

To achieve attainment with the standards, the SJVAPCD has established thresholds of significance for criteria pollutant emissions. Projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan."

CalEEMod™ (v.2022.1) was used to model operational emissions of the proposed Project. The SJVAPCD has established their thresholds of significance by which the Project emissions are compared against to determine the level of significance. If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for operational-generated emissions, the proposed Project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions to the extent feasible. As shown in Table 3.3-8, the unmitigated operational emissions would exceed the SJVACPD operational thresholds of significance for CO, NOx, ROG, and PM_{10}. Based on this, mitigation measures are required to be implemented to reduce CO, NOx, ROG, and PM_{10} emissions. With implementation of the available feasible mitigation measures (Mitigation Measures 3.3-1 through 3.3-4), the proposed Project's emissions would be reduced. As shown in Table 3.3-9the Project's CO emissions could be reduced to approximately 158.0 tons per year, NOx emissions could be reduced to approximately 28.1 tons per year, and ROG emissions could be reduced to approximately 44.4 tons per year, with the implementation of Mitigation Measures 3.3-1 through 3.3-3. Mitigation Measure 3.3-4 provides for a requirement to reduce emissions to the established Air District thresholds through a variety of options including Rule 9510 Indirect Source Review, a VERA, or another method that can be shown to reduce or offset emissions. The quantity of emission reductions needed for the entire project is 58 tons/year of CO, 18.1 tons/year of NOx, 34.4 tons/year of ROG, and 27.2 tons/year of PM_{10}. However, even with implementation of Mitigation Measures 3.3-1 through 3.3-4, emissions reductions may not be sufficient to ensure a reduction of CO, NOx, ROGs, and PM_{10} to below the applicable Air District criteria pollutant thresholds, as shown in Table 3.3-9.

As shown in Table 3.3-11, Project maximum construction emissions is not expected to exceed the SJVAPCD thresholds of significance with the implementation of existing rules and regulations.

The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements, as well as implement the control measures provided by the SJVAPCD for construction-related PM_{10} emissions. Nevertheless, the Project's criteria pollutant emissions would be considered to have a significant and unavoidable impact.

The Project would not be exposed to substantial nearby sources of TACs and would not generate a significant risk of public exposure to TACs.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site; however, the residential density would increase which would result in an increase in residential units. This difference would result in slightly different emissions generated compared to the proposed Project. Emissions would be slightly greater. This impact would be slightly greater when compared to the proposed Project.

Biological Resources

As described in Section 3.4, Biological Resources, construction in the Project site has the potential to result in impacts to special-status species in the region. The Project site provides potential habitat for several species, and some are known to exist in the immediate area, including those discussed in Section 3.4. Implementation of Mitigation Measures 3.4-1 through Mitigation Measure 3.4-17 in Section 3.4 would reduce potentially cumulative impacts to a less than significant level.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site. This alternative would result in the same habitat conversion as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Cultural and Tribal Resources

The Development Area is not located in an area known to have historical and archaeological resources. However, the Cultural Resources Report concludes that there is a moderate potential for buried pre-contact archaeological sites within the Development Area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown historical and archaeological resources. Implementation Mitigation Measure 3.5-1 would ensure that this impact is less than significant. Additionally, while no human remains were found during field surveys of the Project site, implementation of the Mitigation Measure 3.5-1 would ensure that all construction activities, which inadvertently discover human remains implement state-required consultation methods to determine the disposition and historical significance of any discovered human remains. Implementation of Mitigation Measure 3.5-1 would ensure that the potential impact to disturb human remains, including those interred outside of formal cemeteries to a less than significant level.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site. This alternative would result in the same potential to disturb or destroy cultural, historic, archaeological, and tribal resources as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Geology and Soils

As discussed in Section 3.6 Geology and Soils, the Project site does not have a significant risk of becoming unstable as a result landslide, subsidence, soil collapse, liquefaction, liquefaction induced settlement, or lateral spreading. The Project site has a low risk of seismic-related ground

failure because of liquefaction. Landslide potential on the Project site is also low to non-existent. While the City is not within an area known for its seismic activity, there will always be a potential for ground shaking caused by seismic activity anywhere in California, including the Project site. Seismic activity could come from a known active fault s in the region. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Additionally, the City of Clovis has incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

Septic tanks or septic systems are not proposed as part of the Project and would not be installed to serve the Master Plan. The Master Plan area would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines.

The Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are existing regulatory requirements.

The Project site is not expected to contain subsurface paleontological resources, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities. Implementation of Mitigation Measure 3.6-1 would ensure steps would be taken to reduce impacts to paleontological resources if they are discovered during construction, including stopping work in the event potential resources are found, evaluation of the resource by a qualified paleontologist and appropriate handling of any potential resource. This mitigation measure would reduce this impact to a less than significant level.

There are no past or current commercial mining operations within the Project site. Development of the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site. This alternative would result in the same potential for geologic hazards as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Greenhouse Gases, Climate Change and Energy

As presented in Table 3.7-3 in Section 3.7, short-term construction emissions of GHGs are estimated at a maximum of approximately 10,367 MT CO_2e per year. As shown in Table 3.7-4, the annual GHG emissions associated with the proposed Project would be approximately 53,518 MT CO_2e under the unmitigated scenario, and 52,051 MT CO_2e under the mitigated scenario (i.e., with implementation of the mitigation measures provided in Section 3.3: Air Quality of the Draft EIR). The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS.

The proposed Project would use energy resources for the operation of Project buildings (electricity), outdoor lighting (electricity), for on-road vehicle trips (e.g. gasoline and diesel fuel) rerouted by the proposed Project and from off-road and on-road construction activities associated with the proposed Project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through statewide and local measures.

The proposed Project would be in compliance with all applicable federal, State, and local regulations regulating energy usage. For example, PG&E, the electric provider to the proposed Project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide RPS to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E has achieved at least a 33percent mix of renewable energy resources in 2020 and is on track to achieve 60percent mix of renewable energy by 2030. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site; however, density of the residential uses would change. This difference would result in slightly different emissions generated compared to the proposed Project. Emissions would be slightly greater. This impact would be slightly greater when compared to the proposed Project.

Hazards and Hazardous Materials

Site Assessment: Based on the findings of the Phase I ESA and subsequent research and interviews, there was no evidence of controlled recognized environmental conditions (RECs)or historical RECs in connection with the site, as defined by ASTM E 1527-13; however, RECs, American Society for Testing Materials (ASTM) Non-Scope issues and site development issues were identified. However, Section 3.8, Hazards and Hazardous Materials, includes mitigation measure to ensure any impacts related to the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Overall, proposed Project would have a less than significant impact with regards to this environmental issue.

Construction Phase: Further, construction workers and the general public could be exposed to hazards and hazardous materials because of improper handling or use during construction activities (particularly by untrained personnel); transportation accidents; or fires, or other emergencies. Construction workers could also be exposed to hazards associated with accidental releases of hazardous materials, which could result in significant impacts to the health and welfare of people and/or wildlife. Additionally, an accidental release into the environment could result in the contamination of water, habitat, and countless resources. Compliance with existing regulatory requirements of the Regional Water Quality Control Board would require the preparation of a

project specific Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is required to include project specific best management measures that are designed to control erosion and the loss of topsoil to the extent practicable using best management practices (BMPs) that the RWQCB has deemed effective in controlling erosion, sedimentation, and runoff during construction activities.

The proposed Project would also be required to comply with regulations on the transportation of hazardous materials codified in 49 CFR 173 and 49 CFR 177 and CCR Title 26, Division 6. These regulations, which are under the jurisdiction of Caltrans and the California Highway Patrol (CHP), provide specific packaging requirements, define unacceptable hazardous materials shipments, and prescribe safe-transit practices by carriers of hazardous materials. Compliance with these regulations would reduce the risk of exposure to humans and the environment related to the transportation of hazardous materials.

Construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to, CCR Titles 8 and 22, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; and construction vehicles shall be inspected daily for leaks. Off-site activities (e.g., utility construction) would also be required to comply with these regulations. These regulations and codes must be implemented, as appropriate, and are monitored by the State and/or local jurisdictions, including the FCEHS.

Contractors would be required to comply with Cal-EPA's Unified Program; regulated activities would be managed by FCEHS, the designated Certified Unified Program Agency for Fresno County, in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California UFC hazardous material management plans and inventories).

Overall, consistency with federal, State, and local laws and regulations related to the handling of hazardous materials discussed above and implementation of Mitigation Measures 3.8-1 and 3.8-2 would ensure that these potential impacts are reduced to a less than significant level.

Operational Phase: The operational phase of the proposed Project will occur after construction is completed and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes the development of residential structures, which may need to utilize a variety of hazardous materials commonly found in urban areas, including paints, insecticides, detergents, cleaners, and cleaning solvents. If handled appropriately and in compliance with applicable regulations, these materials do not pose a significant risk.

Airports: There are no documented public airports or public use airports within proximity to the Project site.

Emergency Evacuation and Wildfire: In Fresno County, all major roads are available for evacuation, depending on the location and type of emergency that arises. The proposed Project does not include any actions that would impair or physically interfere with any of Fresno County's

emergency plans or evacuation routes. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder the emergency vehicle access or evacuation in the event of an emergency. Any construction project that could involve road closures, traffic detours and congestion, shall be required to obtain traffic control plans approved by the City as the lead agency.

The Project site is not categorized as a "Very High" FHSZ by CalFire. The Project site is not located within an LRA and is categorized as Urban Unzoned or Non-Wildland/Non-Urban. The Project site is in an area that is predominately single-family residential uses, which do not pose a significant risk of wildfire.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site. This alternative would result in the same potential for hazards as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Hydrology and Water Quality

Construction: In accordance with the NPDES Stormwater Program, the Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and the existing regulatory requirements. Further, the Project would be required to incorporate appropriate erosion and sediment control measures per Section 9.110.040 of the City's Municipal Code and adhere to the City's landscape standards designed to reduce runoff and control soil erosion. Compliance with the Construction General Permit and applicable City grading regulations would ensure that the proposed Project would have a less than significant impact relative to this topic.

Operational: The long-term operations of the proposed Project could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious areas associated with roadways, driveways, and residential structures. The Project site will include construction of a new storm drainage system, which will conform to applicable standards and requirements. The storm drainage collection and detention system will be subject to the State Water Resources Control Board Requirements (SWRCB), the Fresno Metropolitan Flood Control District (FMFCD), and City of Clovis regulations, standards, and specifications. This includes, but not limited to, the municipal NPDES storm water discharge permit, as well as any City required Best Management Practices to control the volume, rate, and potential pollutant load of storm water runoff. BMPs will be implemented through the SWPPP program and compliance with existing standards and rules, including the implementation of BMPs, would ensure that the proposed Project would have a less than significant impact relative to this topic.

Infiltration/Natural Recharge: The proposed Project would result in new impervious surfaces within the Master Plan area, which could reduce rainwater infiltration and groundwater recharge compared to existing conditions. However, the Project would include open space areas, including landscaped areas and 43 acres of parks, trails, and open space within MPArea 1, which would

remain largely pervious. This includes the portion of Big Dry Creek Reservoir Outlet Works Channel that runs through the Project site. Further, areas developed with impervious surfaces would route stormwater into the proposed Project's storm drainage system and to FMFCD facilities designed to retain and infiltrate groundwater, eventually discharging to irrigation canals, creeks, and the San Joaquin River. Furthermore, the City documents the sustainable amount of groundwater that can be extracted from year to year and replenished through naturally occurring groundwater recharge. The City will continue to increase its surface water and recycled water supply usage to a point where groundwater extraction is less than the sustainable yield in a normal year. Therefore, while the proposed Project would result in an increase in the amount of impervious surfaces within the Project site when compared to existing conditions, it is not anticipated that the proposed development would interfere substantially with groundwater recharge.

Stormwater Quality: Stormwater quality standards imposed and monitored by the Environmental Protection Agency (EPA) and the SWRCB through the NPDES permit require treatment of stormwater runoff prior to its release into drainage features. Stormwater quality is an integral part of FMFCD's stormwater management system. With the design and construction of flood control improvements included in the proposed storm drainage system in accordance with FMFCD's requirements, the proposed Project would have a less than significant impact relative to this topic.

Flooding: Most of the Project site is located within an area of minimal flood hazard. A portion of the Project site is located within the 500-year flood zone and a portion of the Project site, within the Big Dry Creek Reservoir Outlet Works Channel (a man-made channel), is within the 100-year flood zone. The portion of the Project site within the 100-year flood zone (associated with Big Dry Creek Reservoir Outlet Works Channel) runs in a southwesterly direction through the center of the Development Area. There are no areas of proposed development within the Project site that are designated as having an increased flood risk due to levee, nor are any these areas located within a regulatory floodway.

Additionally, as discussed in Chapter 3.9-4 of this EIR, the proposed Project is not anticipated to risk release of pollutants due to project inundation, including flooding because of the failure of a levee or dam, seiche, or tsunami. The Project site is approximately 118 miles from the coastline of the Pacific Ocean, which is sufficiently distant to preclude effects from a tsunami. Given the low risk of earthquake-induced seiche and the low water levels of the dam, risks of seiches to the Project site would be low. Furthermore, dam failure is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site. This alternative would result in the same potential for impacts to hydrology and water quality as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Land Use, Population, and Housing

The Project site is located directly north of the City of Clovis limit line and is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land, and open space land uses. The Project site would result in an extension of developed uses within an area of the City that currently has approved development plans within the vicinity of the Project site. The Project would provide roadways and pedestrian pathways to connect the Project site to the existing circulation system and to allow access to and from the site. Development of the Project site would not result in physical barriers, such as a highway, wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing and planned developments. The proposed Project would have a less than significant impact regarding the physical division of an established community. The proposed Project would not displace substantial numbers of people or existing housing.

Implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect.

The proposed infrastructure improvements would be adequately sized to serve the proposed Project only. The proposed infrastructure would not be oversized to accommodate any growth beyond the Project site into areas that were not previously served. While the proposed Project will result in growth, it is not anticipated to significantly induce growth. Implementation of the proposed Project will have a less than significant impact relative to this topic.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site; however, density of the residential uses would change. This difference would not result in a conflict with land use, zoning, or policies. The increased density of residential uses, however, would be less compatible with the neighbors to the north compared to the proposed Project. As such, this impact would be greater when compared to the proposed Project.

Noise

When comparing existing plus Project levels to existing levels, Shepherd Avenue from Temperence Avenue to Locan Avenue has the potential for significant impact as the only roadway segment with an increase of more than three dB. This segment is in the City of Clovis. The Project will stay within the normally compatible range for single family residential; therefore, this would not be considered an impact.

The Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Residences along Shepherd Avenue will be exposed to levels up to 69.4 dBA CNEL at the property line. These are within the normally compatible levels for residential uses, but above the exterior 65 dBA CNEL standard as outlined in Table ES-1 of the City of Clovis 2014 General Plan.

To meet the exterior residential standards of 65 dBA CNEL, the unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue must be shielded by six-foot sound walls. These walls must be at least 4.2 pounds per square foot (lbs/ft^2). Any unshielded residential

glass facades within 80 feet of the centerline of Shepherd Avenue or Sunnyside Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.

The proposed Project would include typical residential noise sources which would be compatible with the adjacent existing residential uses (a.k.a. neighborhood traffic, yard equipment, truck deliveries, garbage collected, etc.). The Project's proposed park uses are located internal to the Project site and would not impact off-site residential uses.

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dBA CNEL, or less, will typically comply with the City of Clovis 45 dBA CNEL interior noise level standard. Therefore, this impact would be less than significant.

During the construction of the Project, including roads, water, sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the Project vicinity. Construction noise is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City of Clovis Municipal Code Section 5.27.604. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the Project vicinity.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Noise levels will be the loudest during the grading phase. The modeling assumes construction equipment as close as 25 feet from the adjacent residences and an average of 300 feet away from the adjacent residences. Unmitigated noise levels at 300 feet have the potential to reach 67 dBA L_{eq} and 93 dBA L_{max} at the nearest sensitive receptors during grading. Noise levels for the other construction phases would be lower, approximately from 53 to 66 dBA L_{eq} and 86 to 91 dBA L_{max}.

Noise reduction policies within the General Plan Noise Element and standards within the Municipal Code are provided to further reduce construction noise.

The construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer or other earthmoving/grading equipment, which is calculated to be below the vibration impact threshold.

The Project site is outside the Fresno Yosemite International Airport noise contours and there are no private airstrips, public airports, or public use airports within two miles of the Project site.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site; however, the mix of land uses and zoning would change. These differences would result in slightly different travel and use characteristics compared to the proposed Project.

Noise generated by traffic would be slightly greater. Construction noise would largely be the same. As such, this impact would be slightly greater when compared to the proposed Project.

Public Services and Recreation

The proposed Project will create an increased demand for public services such as police protection, fire services, school services, and recreation compared to existing conditions. To the extent that the Project would have an incremental increase in demand on public services, the Project would be required to pay the impact fees to assure that the current level of service goals of the City are met. Impact fees from new development are collected based upon projected impacts from each development. The adequacy of impact fees is reviewed periodically to ensure that the fee is commensurate with the service. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with police services.

The Project does not propose and would not create a need for new or physically altered public service facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, the Project would not result in adverse physical impacts associated with such facilities.

Although the Project's proposed new open space opportunities would bring the City closer to its goal of parkland for its future residents, it would not provide enough parkland needed to meet the four acres per 1,000 people standard. However, Municipal Code Chapter 3.04, Park Acquisition and Development, states that any developer who plans for dwelling units to be constructed in the City shall pay, in addition to any other fees required to be paid by the City, a fee which shall be calculated on the basis of park acreage designated in the Clovis General Plan consisting of the estimated total land acquisition and construction cost distributed on the basis of the remaining developable area within the sphere of influence. In accordance with the Municipal Code, fees are deposited in specific funds that shall be used solely for the acquisition, improvement and expansion of public parks and recreation facilities as outlined in the park acquisition and improvement fee update. Upon provision and dedication of the proposed parkland and/or payment of required fees in accordance with the Clovis Municipal Code Chapter 3.04, and other Municipal Code policies, the proposed Project will result in a less than significant impact.

The proposed Project would not significantly increase the use of an existing park, or other recreational facility. Therefore, it is not anticipated that any substantial physical deterioration of existing facilities would occur or be accelerated. As such, the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site; however, density of the residential uses would change. This difference would result in slightly different demands for public services compared to the proposed Project. Demand for services would be slightly greater. It is still anticipated that impact fees would be adequate to

offset the financial impact on public service providers. Overall, this impact would be slightly greater when compared to the proposed Project.

Transportation and Circulation

The Project VMT per capita is approximately 116 percent higher than Fresno County's VMT per capita threshold and approximately 99 percent higher than the VMT per employee threshold. Project design features aim to promote overall mobility with the goal of reducing VMT and reducing greenhouse gas emissions. Implementation of these Project design features may possibly reduce the Project's VMT. The Project design features can help offset some of the VMT impacts of the Project. Because the development would generate vehicle travel exceeding 13 percent below the established regional average under Existing and Cumulative Conditions, even with implementation of Project Design measures that provide mitigating effects, development of the proposed Project would result in a significant and unavoidable impact.

The City of Clovis Active Transportation Plan (2022) and City of Clovis General Plan (2014) were reviewed to determine if the proposed Project results in any inconsistencies with adopted transportation related policies, and the Project is not anticipated to conflict with policies, plans, and programs addressing the circulation system for alternative modes.

Buildout of the proposed Master Plan would result in some changes to the City's circulation network in the vicinity of the project but would not increase hazards or incompatible uses due to design features. Roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, and would have to meet design guidelines such as the accessibility requirements of Title 24 (California Building Code), ADA and PROWAG standards, California Manual of Uniform Traffic Control Devices (MUTCD), and the Caltrans Roadway Design Manual. Therefore, development of the proposed Project would not result in a conflict with an existing or planned pedestrian facility, bicycle facility, or transit service/facility.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site, however, the mix of land uses and zoning would change. These differences would result in slightly different traffic generation, distribution, and VMT compared to the proposed Project. Traffic generation, distribution, and VMT would be slightly greater. It is still anticipated that installation of recommended improvements and payment of impact fees would be adequate to offset the level of services impacts, but VMT impacts would be greater than the already significant and unavoidable VMT impacts. Overall, this impact would be slightly greater when compared to the proposed Project.

Utilities

The proposed Project would increase the amount of wastewater requiring treatment. According to the City's 2017 Wastewater Master Plan Update, single-family residential uses are estimated to generate 55 gallons per capita per day or 175 gallons per day per equivalent dwelling unit (edu) for single family residential land uses and 142 gallons per day edu for multi-family residential units. The Project site includes up to 3,268 single- and multi-family residential units. Using the more conservative rate which assumes that the Project would only develop single-family

residential uses, the proposed Project would generate approximately 575,050 gallons per day (or 0.575 mgd) of wastewater. Hydraulic modeling updates represent more flexibility in construction and unit types, which estimated the Project's average dry weather flow at approximately 0.513 mgd of wastewater. Occupancy of the proposed Project would be prohibited without sewer allocation. An issuance of sewer allocation from the City's available capacity would ensure that there would be a final determination by the wastewater treatment and/or collection provider that there is adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the Regional Water Reclamation Facility (RWRF) with a subsequent allocation of capacity to the proposed Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments.

The City of Clovis Water Reuse Facility is currently in compliance with the WDR requirements of Order No. 5-2019-0021 NPDES NO. CA0085235. The projected flows of the proposed Project are not expected to exceed the treatment capacity available for treatment. Full buildout of the proposed Project would slightly increase the existing treatment demand at the RWRF. As described above, the City must also periodically review and update their Utility Master Plans, including the Wastewater Master Plan, and as growth continues to occur within the City, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. These pre-existing proactive efforts ensure the City would be able to reliably treat the wastewater as the community expands its population up to and through the next plant expansion, including with development of the proposed Project.

A majority of the Master Plan has been planned for urban uses and is identified in the City's General Plan as being located within the Northeast Urban Center and specifically, within Focus Area 13. As such, the Master Plan has been anticipated for potential development. Given that projected wastewater generation volumes associated with the buildout of the Master Plan would not exceed the projected wastewater generation volumes described in the Wastewater Master Plan and the Urban Water Management Plan, as described under Impact 3.14-1. Development of the proposed Project would have a less than significant impact relative to this topic.

The wastewater collection and conveyance system that will serve the proposed Project will consist of engineered infrastructure consistent with the City's existing infrastructure requirements. New wastewater collection and conveyance infrastructure needed for the proposed Project will require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients. The applicant will refine the wastewater collection/conveyance infrastructure design through the development of improvements plans which undergo review by the Engineering Department to ensure consistency with the City's engineering standards. This improvement plan process will include full engineering design (i.e. location, depth, slope, etc.) of all conveyance infrastructure as well as a review of new sewer pump stations and new force mains if needed. Ultimately, the sanitary sewer collection system will be an underground collection system installed as per the City of Clovis standards and specifications.

Therefore, the installation of the wastewater collection and conveyance system infrastructure to serve the proposed Project would have a less than significant impact relative to this topic. The wastewater treatment plant would not require upgrades or improvements in order to serve the proposed Project. Therefore, development of the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Increased Density Alternative as this alternative is located on the same site; however, the mix of land uses and zoning would change. These differences would result in slightly different demands for utility services compared to the proposed Project. Demand for utilities would be slightly greater. It is still anticipated all utility providers could serve this alternative; however, this impact would be slightly greater when compared to the proposed Project.

REDUCED DENSITY ALTERNATIVE

Aesthetics and Visual Resources

As described in Section 3.1, development of the proposed Project changes the visual character of the Project site, as it would convert the approximately 507-acre Master Plan area from its existing use, which consists of a combination of fallow and grazing land, several rural residences, offices for Contractor's Corp Yard and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described above, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses. These impacts related to a change in visual character may be considered "attractive" to one viewer and "unattractive" to other viewers. It is noted that the Clovis General Plan EIR concluded that adoption of the General Plan, which contemplated urbanization of the agricultural lands within the General Plan study area, was a less than significant impact.[3]

There are no designated State Scenic Highways in the vicinity of the Project site. No officially designated State scenic highways are in the City of Clovis. The nearest "eligible" State Scenic Highway to the City is SR 168, which is located over one mile to the south of the Project site at its closest point. Additionally, there are no "eligible" highway segments in the Project vicinity that may be included in the State Scenic Highway system.

The proposed Project would be required to implement existing City regulations aimed at reducing light and glare impacts to ensure that no unusual daytime glare or nighttime lighting is produced. Specifically, the Clovis Development Code states that direct glare shall not be permitted and provides standards for nuisance prevention and shielding requirements. Section 9.22.050 of the Clovis Development Code contains standards and provisions related to exterior lighting. While implementation of regulations and standards within the Clovis Development Code would reduce impacts associated with increased light and glare, the impacts would not be eliminated entirely,

[3] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

and the overall level of light and glare in the Project site would increase in general as urban development occurs. All proposed outdoor lighting is required to meet applicable City standards regulating outdoor lighting, including 9.22.050 Exterior light and glare of the City's Development code, to minimize any impacts resulting from outdoor lighting on adjacent properties. Implementation of the existing City standards would reduce potential impacts associated with nighttime lighting and light spillage onto adjacent properties to a less than significant level.

Overall, the proposed Project would not substantially impact the visual character or quality of the Project site or its surroundings, damage scenic resources within a State Scenic Highway, or potentially significant new sources of light and glare.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site. This alternative would result in a reduction in residential density compared to the Project but, overall, it would not substantially impact the visual character or quality of the Project site or its surroundings, damage scenic resources within a State Scenic Highway, or potentially significant new sources of light and glare. As such, this impact would be largely equal when compared to the proposed Project.

Agricultural Resources

Development of the proposed Project would result in the permanent conversion of approximately 476.24 acres of Farmland of Local Importance, as designated by the California Department of Conservation on the June 2020 Important Farmlands Map and as shown on Figure 3.2-1, to nonagricultural use. After looking at site-specific characteristics more closely for the Project site, it is noteworthy that the Department of Conservation's designations do not accurately and fully consider site specific characteristics such as the lack of any irrigation or crop production on the Project site. To reconcile these facts and analyze the site-specific characteristics more fully, the Clovis General Plan calls for the use of the LESA to evaluate the significance of the agricultural conversion. It is noted that the LESA model was developed by the Department of Conservation, which is the same agency that published the Important Farmland's Map. The proposed Project has a sub score of 25.44 for the Land Evaluation and a sub score of 15 for the Site Assessment, which means the conversion of the land on the Project site is not considered significant according to the California Department of Conservation's established thresholds.

There is one parcel within the Non-development area under a Williamson Act contract. This parcel is not anticipated for any development and no conflict would occur from project approval. There are two parcels within the Master Plan Area with an active Williamson Act contract. The parcels are located within Planning Area (PA) 29. These parcels total 34.17 acres and are part of MPArea 2, which is not anticipated for immediate development. MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan, but these areas would be required to have a project-level CEQA analysis when the property owners decide to develop the parcels. Immediate development would have the potential for a conflict because the Williamson Act contract is in effect, however, immediate development is not anticipated for the parcels under a Williamson Act. A Williamson Act contract is a voluntary agreement and the cancellation process is defined in *Williamson Act Cancellation Process, Guide for Local Governments* (California

Department of Conservation 2022). The process can involve a filing of non-renewal and a lapse of the appropriate time, or a standard cancellation with a fee assessment.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site. This alternative would result in the same land conversion as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Air Quality

To achieve attainment with the standards, the SJVAPCD has established thresholds of significance for criteria pollutant emissions. Projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan."

CalEEMod™ (v.2022.1) was used to model operational emissions of the proposed Project. The SJVAPCD has established their thresholds of significance by which the Project emissions are compared against to determine the level of significance. If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for operational-generated emissions, the proposed Project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions to the extent feasible. As shown in Table 3.3-8, the unmitigated operational emissions would exceed the SJVACPD operational thresholds of significance for CO, NOx, ROG, and PM_{10}. Based on this, mitigation measures are required to be implemented to reduce CO, NOx, ROG, and PM_{10} emissions. With implementation of the available feasible mitigation measures (Mitigation Measures 3.3-1 through 3.3-4), the proposed Project's emissions would be reduced. As shown in Table 3.3-9the Project's CO emissions could be reduced to approximately 158.0 tons per year, NOx emissions could be reduced to approximately 28.1 tons per year, and ROG emissions could be reduced to approximately 44.4 tons per year, with the implementation of Mitigation Measures 3.3-1 through 3.3-3. Mitigation Measure 3.3-4 provides for a requirement to reduce emissions to the established Air District thresholds through a variety of options including Rule 9510 Indirect Source Review, a VERA, or another method that can be shown to reduce or offset emissions. The quantity of emission reductions needed for the entire project is 58 tons/year of CO, 18.1 tons/year of NOx, 34.4 tons/year of ROG, and 27.2 tons/year of PM_{10}. However, even with implementation of Mitigation Measures 3.3-1 through 3.3-4, emissions reductions may not be sufficient to ensure a reduction of CO, NOx, ROGs, and PM_{10} to below the applicable Air District criteria pollutant thresholds, as shown in Table 3.3-9.

As shown in Table 3.3-11, Project maximum construction emissions is not expected to exceed the SJVAPCD thresholds of significance with the implementation of existing rules and regulations.

The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements, as well as implement the control measures provided by the SJVAPCD for construction-related PM_{10} emissions. Nevertheless, the Project's criteria pollutant emissions would be considered to have a significant and unavoidable impact.

The Project would not be exposed to substantial nearby sources of TACs and would not generate a significant risk of public exposure to TACs.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site; however, the density of the residential uses would decrease. These differences would result in slightly different emissions compared to the proposed Project. Emissions would be slightly less, as there would be fewer homes and residents. Overall, this impact would be slightly less when compared to the proposed Project.

Biological Resources

As described in Section 3.4, Biological Resources, construction in the Project site has the potential to result in impacts to special-status species in the region. The Project site provides potential habitat for several species, and some are known to exist in the immediate area, including those discussed in Section 3.4. Implementation of Mitigation Measures 3.4-1 through Mitigation Measure 3.4-17 in Section 3.4 would reduce potentially cumulative impacts to a less than significant level.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site. This alternative would result in the same habitat conversion as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Cultural and Tribal Resources

The Development Area is not located in an area known to have historical and archaeological resources. However, the Cultural Resources Report concludes that there is a moderate potential for buried pre-contact archaeological sites within the Development Area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown historical and archaeological resources. Implementation Mitigation Measure 3.5-1 would ensure that this impact is less than significant. Additionally, while no human remains were found during field surveys of the Project site, implementation of the Mitigation Measure 3.5-1 would ensure that all construction activities, which inadvertently discover human remains implement state-required consultation methods to determine the disposition and historical significance of any discovered human remains. Implementation of Mitigation Measure 3.5-1 would ensure that the potential impact to disturb human remains, including those interred outside of formal cemeteries to a less than significant level.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site. This alternative would result in the same potential to disturb or destroy cultural, historic, archaeological, and tribal resources as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Geology and Soils

As discussed in Section 3.6 Geology and Soils, the Project site does not have a significant risk of becoming unstable as a result landslide, subsidence, soil collapse, liquefaction, liquefaction induced settlement, or lateral spreading. The Project site has a low risk of seismic-related ground failure because of liquefaction. Landslide potential on the Project site is also low to non-existent. While the City is not within an area known for its seismic activity, there will always be a potential

for ground shaking caused by seismic activity anywhere in California, including the Project site. Seismic activity could come from a known active fault s in the region. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Additionally, the City of Clovis has incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

Septic tanks or septic systems are not proposed as part of the Project and would not be installed to serve the Master Plan. The Master Plan area would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines.

The Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are existing regulatory requirements.

The Project site is not expected to contain subsurface paleontological resources, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities. Implementation of Mitigation Measure 3.6-1 would ensure steps would be taken to reduce impacts to paleontological resources if they are discovered during construction, including stopping work in the event potential resources are found, evaluation of the resource by a qualified paleontologist and appropriate handling of any potential resource. This mitigation measure would reduce this impact to a less than significant level.

There are no past or current commercial mining operations within the Project site. Development of the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site. This alternative would result in the same potential for geologic hazards as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Greenhouse Gases, Climate Change and Energy

As presented in Table 3.7-3 in Section 3.7, short-term construction emissions of GHGs are estimated at a maximum of approximately 10,367 MT CO_2e per year. As shown in Table 3.7-4, the annual GHG emissions associated with the proposed Project would be approximately 53,518 MT CO_2e under the unmitigated scenario, and 52,051 MT CO_2e under the mitigated scenario (i.e., with implementation of the mitigation measures provided in Section 3.3: Air Quality of the Draft EIR). The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS.

The proposed Project would use energy resources for the operation of Project buildings (electricity), outdoor lighting (electricity), for on-road vehicle trips (e.g. gasoline and diesel fuel) rerouted by the proposed Project and from off-road and on-road construction activities associated with the proposed Project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through statewide and local measures.

The proposed Project would be in compliance with all applicable federal, State, and local regulations regulating energy usage. For example, PG&E, the electric provider to the proposed Project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide RPS to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E has achieved at least a 33percent mix of renewable energy resources in 2020 and is on track to achieve 60percent mix of renewable energy by 2030. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site; however, the residential density would decrease. This difference would result in slightly different emissions compared to the proposed Project. Emissions would be slightly less, as there were be fewer homes and residents. Overall, this impact would be slightly less when compared to the proposed Project.

Hazards and Hazardous Materials

Site Assessment: Based on the findings of the Phase I ESA and subsequent research and interviews, there was no evidence of controlled recognized environmental conditions (RECs)or historical RECs in connection with the site, as defined by ASTM E 1527-13; however, RECs, American Society for Testing Materials (ASTM) Non-Scope issues and site development issues were identified. However, Section 3.8, Hazards and Hazardous Materials, includes mitigation measure to ensure any impacts related to the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Overall, proposed Project would have a less than significant impact with regards to this environmental issue.

Construction Phase: Further, construction workers and the general public could be exposed to hazards and hazardous materials because of improper handling or use during construction activities (particularly by untrained personnel); transportation accidents; or fires, or other emergencies. Construction workers could also be exposed to hazards associated with accidental releases of hazardous materials, which could result in significant impacts to the health and welfare of people and/or wildlife. Additionally, an accidental release into the environment could result in the contamination of water, habitat, and countless resources. Compliance with existing regulatory requirements of the Regional Water Quality Control Board would require the preparation of a

project specific Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is required to include project specific best management measures that are designed to control erosion and the loss of topsoil to the extent practicable using best management practices (BMPs) that the RWQCB has deemed effective in controlling erosion, sedimentation, and runoff during construction activities.

The proposed Project would also be required to comply with regulations on the transportation of hazardous materials codified in 49 CFR 173 and 49 CFR 177 and CCR Title 26, Division 6. These regulations, which are under the jurisdiction of Caltrans and the California Highway Patrol (CHP), provide specific packaging requirements, define unacceptable hazardous materials shipments, and prescribe safe-transit practices by carriers of hazardous materials. Compliance with these regulations would reduce the risk of exposure to humans and the environment related to the transportation of hazardous materials.

Construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to, CCR Titles 8 and 22, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; and construction vehicles shall be inspected daily for leaks. Off-site activities (e.g., utility construction) would also be required to comply with these regulations. These regulations and codes must be implemented, as appropriate, and are monitored by the State and/or local jurisdictions, including the FCEHS.

Contractors would be required to comply with Cal-EPA's Unified Program; regulated activities would be managed by FCEHS, the designated Certified Unified Program Agency for Fresno County, in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California UFC hazardous material management plans and inventories).

Overall, consistency with federal, State, and local laws and regulations related to the handling of hazardous materials discussed above and implementation of Mitigation Measures 3.8-1 and 3.8-2 would ensure that these potential impacts are reduced to a less than significant level.

Operational Phase: The operational phase of the proposed Project will occur after construction is completed and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes the development of residential structures, which may need to utilize a variety of hazardous materials commonly found in urban areas, including paints, insecticides, detergents, cleaners, and cleaning solvents. If handled appropriately and in compliance with applicable regulations, these materials do not pose a significant risk.

Airports: There are no documented public airports or public use airports within proximity to the Project site.

Emergency Evacuation and Wildfire: In Fresno County, all major roads are available for evacuation, depending on the location and type of emergency that arises. The proposed Project does not include any actions that would impair or physically interfere with any of Fresno County's

emergency plans or evacuation routes. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder the emergency vehicle access or evacuation in the event of an emergency. Any construction project that could involve road closures, traffic detours and congestion, shall be required to obtain traffic control plans approved by the City as the lead agency.

The Project site is not categorized as a "Very High" FHSZ by CalFire. The Project site is not located within an LRA and is categorized as Urban Unzoned or Non-Wildland/Non-Urban. The Project site is in an area that is predominately single-family residential uses, which do not pose a significant risk of wildfire.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site. This alternative would result in the same potential for hazards as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Hydrology and Water Quality

Construction: In accordance with the NPDES Stormwater Program, the Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and the existing regulatory requirements. Further, the Project would be required to incorporate appropriate erosion and sediment control measures per Section 9.110.040 of the City's Municipal Code and adhere to the City's landscape standards designed to reduce runoff and control soil erosion. Compliance with the Construction General Permit and applicable City grading regulations would ensure that the proposed Project would have a less than significant impact relative to this topic.

Operational: The long-term operations of the proposed Project could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious areas associated with roadways, driveways, and residential structures. The Project site will include construction of a new storm drainage system, which will conform to applicable standards and requirements. The storm drainage collection and detention system will be subject to the State Water Resources Control Board Requirements (SWRCB), the Fresno Metropolitan Flood Control District (FMFCD), and City of Clovis regulations, standards, and specifications. This includes, but not limited to, the municipal NPDES storm water discharge permit, as well as any City required Best Management Practices to control the volume, rate, and potential pollutant load of storm water runoff. BMPs will be implemented through the SWPPP program and compliance with existing standards and rules, including the implementation of BMPs, would ensure that the proposed Project would have a less than significant impact relative to this topic.

Infiltration/Natural Recharge: The proposed Project would result in new impervious surfaces within the Master Plan area, which could reduce rainwater infiltration and groundwater recharge compared to existing conditions. However, the Project would include open space areas, including landscaped areas and 43 acres of parks, trails, and open space within MPArea 1, which would

remain largely pervious. This includes the portion of Big Dry Creek Reservoir Outlet Works Channel that runs through the Project site. Further, areas developed with impervious surfaces would route stormwater into the proposed Project's storm drainage system and to FMFCD facilities designed to retain and infiltrate groundwater, eventually discharging to irrigation canals, creeks, and the San Joaquin River. Furthermore, the City documents the sustainable amount of groundwater that can be extracted from year to year and replenished through naturally occurring groundwater recharge. The City will continue to increase its surface water and recycled water supply usage to a point where groundwater extraction is less than the sustainable yield in a normal year. Therefore, while the proposed Project would result in an increase in the amount of impervious surfaces within the Project site when compared to existing conditions, it is not anticipated that the proposed development would interfere substantially with groundwater recharge.

Stormwater Quality: Stormwater quality standards imposed and monitored by the Environmental Protection Agency (EPA) and the SWRCB through the NPDES permit require treatment of stormwater runoff prior to its release into drainage features. Stormwater quality is an integral part of FMFCD's stormwater management system. With the design and construction of flood control improvements included in the proposed storm drainage system in accordance with FMFCD's requirements, the proposed Project would have a less than significant impact relative to this topic.

Flooding: Most of the Project site is located within an area of minimal flood hazard. A portion of the Project site is located within the 500-year flood zone and a portion of the Project site, within the Big Dry Creek Reservoir Outlet Works Channel (a man-made channel), is within the 100-year flood zone. The portion of the Project site within the 100-year flood zone (associated with Big Dry Creek Reservoir Outlet Works Channel) runs in a southwesterly direction through the center of the Development Area. There are no areas of proposed development within the Project site that are designated as having an increased flood risk due to levee, nor are any these areas located within a regulatory floodway.

Additionally, as discussed in Chapter 3.9-4 of this EIR, the proposed Project is not anticipated to risk release of pollutants due to project inundation, including flooding because of the failure of a levee or dam, seiche, or tsunami. The Project site is approximately 118 miles from the coastline of the Pacific Ocean, which is sufficiently distant to preclude effects from a tsunami. Given the low risk of earthquake-induced seiche and the low water levels of the dam, risks of seiches to the Project site would be low. Furthermore, dam failure is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site. This alternative would result in the same potential for impacts to hydrology and water quality as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Land Use, Population, and Housing

The Project site is located directly north of the City of Clovis limit line and is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land, and open space land uses. The Project site would result in an extension of developed uses within an area of the City that currently has approved development plans within the vicinity of the Project site. The Project would provide roadways and pedestrian pathways to connect the Project site to the existing circulation system and to allow access to and from the site. Development of the Project site would not result in physical barriers, such as a highway, wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing and planned developments. The proposed Project would have a less than significant impact regarding the physical division of an established community. The proposed Project would not displace substantial numbers of people or existing housing.

Implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect.

The proposed infrastructure improvements would be adequately sized to serve the proposed Project only. The proposed infrastructure would not be oversized to accommodate any growth beyond the Project site into areas that were not previously served. While the proposed Project will result in growth, it is not anticipated to significantly induce growth. Implementation of the proposed Project will have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site; however, the residential density would decrease. These differences would not result in a conflict with land use, zoning, or policies. The reduced density of residential uses, however, would be more compatible with the neighbors to the south compared to the proposed Project. As such, this impact would be less when compared to the proposed Project.

Noise

When comparing existing plus Project levels to existing levels, Shepherd Avenue from Temperence Avenue to Locan Avenue has the potential for significant impact as the only roadway segment with an increase of more than three dB. This segment is in the City of Clovis. The Project will stay within the normally compatible range for single family residential; therefore, this would not be considered an impact.

The Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Residences along Shepherd Avenue will be exposed to levels up to 69.4 dBA CNEL at the property line. These are within the normally compatible levels for residential uses, but above the exterior 65 dBA CNEL standard as outlined in Table ES-1 of the City of Clovis 2014 General Plan.

To meet the exterior residential standards of 65 dBA CNEL, the unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue must be shielded by six-foot sound walls. These walls must be at least 4.2 pounds per square foot (lbs/ft^2). Any unshielded residential

glass facades within 80 feet of the centerline of Shepherd Avenue or Sunnyside Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.

The proposed Project would include typical residential noise sources which would be compatible with the adjacent existing residential uses (a.k.a. neighborhood traffic, yard equipment, truck deliveries, garbage collected, etc.). The Project's proposed park uses are located internal to the Project site and would not impact off-site residential uses.

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dBA CNEL, or less, will typically comply with the City of Clovis 45 dBA CNEL interior noise level standard. Therefore, this impact would be less than significant.

During the construction of the Project, including roads, water, sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the Project vicinity. Construction noise is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City of Clovis Municipal Code Section 5.27.604. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the Project vicinity.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Noise levels will be the loudest during the grading phase. The modeling assumes construction equipment as close as 25 feet from the adjacent residences and an average of 300 feet away from the adjacent residences. Unmitigated noise levels at 300 feet have the potential to reach 67 dBA L_{eq} and 93 dBA L_{max} at the nearest sensitive receptors during grading. Noise levels for the other construction phases would be lower, approximately from 53 to 66 dBA L_{eq} and 86 to 91 dBA L_{max}.

Noise reduction policies within the General Plan Noise Element and standards within the Municipal Code are provided to further reduce construction noise.

The construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer or other earthmoving/grading equipment, which is calculated to be below the vibration impact threshold.

The Project site is outside the Fresno Yosemite International Airport noise contours and there are no private airstrips, public airports, or public use airports within two miles of the Project site.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site; however, the mix of land uses and zoning would change. These differences would result in slightly lower travel and use characteristics compared to the proposed Project.

Noise generated by traffic would be slightly lower. Construction noise would slightly lower as well. As such, this impact would be slightly less when compared to the proposed Project.

Public Services and Recreation

The proposed Project will create an increased demand for public services such as police protection, fire services, school services, and recreation compared to existing conditions. To the extent that the Project would have an incremental increase in demand on public services, the Project would be required to pay the impact fees to assure that the current level of service goals of the City are met. Impact fees from new development are collected based upon projected impacts from each development. The adequacy of impact fees is reviewed periodically to ensure that the fee is commensurate with the service. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with police services.

The Project does not propose and would not create a need for new or physically altered public service facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, the Project would not result in adverse physical impacts associated with such facilities.

Although the Project's proposed new open space opportunities would bring the City closer to its goal of parkland for its future residents, it would not provide enough parkland needed to meet the four acres per 1,000 people standard. However, Municipal Code Chapter 3.04, Park Acquisition and Development, states that any developer who plans for dwelling units to be constructed in the City shall pay, in addition to any other fees required to be paid by the City, a fee which shall be calculated on the basis of park acreage designated in the Clovis General Plan consisting of the estimated total land acquisition and construction cost distributed on the basis of the remaining developable area within the sphere of influence. In accordance with the Municipal Code, fees are deposited in specific funds that shall be used solely for the acquisition, improvement and expansion of public parks and recreation facilities as outlined in the park acquisition and improvement fee update. Upon provision and dedication of the proposed parkland and/or payment of required fees in accordance with the Clovis Municipal Code Chapter 3.04, and other Municipal Code policies, the proposed Project will result in a less than significant impact.

The proposed Project would not significantly increase the use of an existing park, or other recreational facility. Therefore, it is not anticipated that any substantial physical deterioration of existing facilities would occur or be accelerated. As such, the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site; however, the residential density would decrease. This difference would result in slightly different demands for public services compared to the proposed Project. Demand for services would be slightly less, as there were be fewer homes and residents. It is still anticipated

that impact fees would be adequate to offset the financial impact on public service providers. Overall, this impact would be slightly less when compared to the proposed Project.

Transportation and Circulation

The Project VMT per capita is approximately 116 percent higher than Fresno County's VMT per capita threshold and approximately 99 percent higher than the VMT per employee threshold. Project design features aim to promote overall mobility with the goal of reducing VMT and reducing greenhouse gas emissions. Implementation of these Project design features may possibly reduce the Project's VMT. The Project design features can help offset some of the VMT impacts of the Project. Because the development would generate vehicle travel exceeding 13 percent below the established regional average under Existing and Cumulative Conditions, even with implementation of Project Design measures that provide mitigating effects, development of the proposed Project would result in a significant and unavoidable impact.

The City of Clovis Active Transportation Plan (2022) and City of Clovis General Plan (2014) were reviewed to determine if the proposed Project results in any inconsistencies with adopted transportation related policies, and the Project is not anticipated to conflict with policies, plans, and programs addressing the circulation system for alternative modes.

Buildout of the proposed Master Plan would result in some changes to the City's circulation network in the vicinity of the project but would not increase hazards or incompatible uses due to design features. Roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, and would have to meet design guidelines such as the accessibility requirements of Title 24 (California Building Code), ADA and PROWAG standards, California Manual of Uniform Traffic Control Devices (MUTCD), and the Caltrans Roadway Design Manual. Therefore, development of the proposed Project would not result in a conflict with an existing or planned pedestrian facility, bicycle facility, or transit service/facility.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site; however, the mix of land uses and zoning would change. These differences would result in slightly less traffic generation, distribution, and VMT compared to the proposed Project. Traffic generation, distribution, and total VMT would be slightly less. It is still anticipated that installation of recommended improvements and payment of impact fees would be adequate to offset the level of services impacts. Total VMT would be less, but per capita VMT would be approximately the same, which would still result in a significant and unavoidable impact. Overall, this impact would be slightly less when compared to the proposed Project.

Utilities

The proposed Project would increase the amount of wastewater requiring treatment. According to the City's 2017 Wastewater Master Plan Update, single-family residential uses are estimated to generate 55 gallons per capita per day or 175 gallons per day per equivalent dwelling unit (edu) for single family residential land uses and 142 gallons per day edu for multi-family residential units. The Project site includes up to 3,268 single- and multi-family residential units. Using the more conservative rate which assumes that the Project would only develop single-family

residential uses, the proposed Project would generate approximately 575,050 gallons per day (or 0.575 mgd) of wastewater. Hydraulic modeling updates represent more flexibility in construction and unit types, which estimated the Project's average dry weather flow at approximately 0.513 mgd of wastewater. Occupancy of the proposed Project would be prohibited without sewer allocation. An issuance of sewer allocation from the City's available capacity would ensure that there would be a final determination by the wastewater treatment and/or collection provider that there is adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the Regional Water Reclamation Facility (RWRF) with a subsequent allocation of capacity to the proposed Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments.

The City of Clovis Water Reuse Facility is currently in compliance with the WDR requirements of Order No. 5-2019-0021 NPDES NO. CA0085235. The projected flows of the proposed Project are not expected to exceed the treatment capacity available for treatment. Full buildout of the proposed Project would slightly increase the existing treatment demand at the RWRF. As described above, the City must also periodically review and update their Utility Master Plans, including the Wastewater Master Plan, and as growth continues to occur within the City, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. These pre-existing proactive efforts ensure the City would be able to reliably treat the wastewater as the community expands its population up to and through the next plant expansion, including with development of the proposed Project.

A majority of the Master Plan has been planned for urban uses and is identified in the City's General Plan as being located within the Northeast Urban Center and specifically, within Focus Area 13. As such, the Master Plan has been anticipated for potential development. Given that projected wastewater generation volumes associated with the buildout of the Master Plan would not exceed the projected wastewater generation volumes described in the Wastewater Master Plan and the Urban Water Management Plan, as described under Impact 3.14-1. Development of the proposed Project would have a less than significant impact relative to this topic.

The wastewater collection and conveyance system that will serve the proposed Project will consist of engineered infrastructure consistent with the City's existing infrastructure requirements. New wastewater collection and conveyance infrastructure needed for the proposed Project will require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients. The applicant will refine the wastewater collection/conveyance infrastructure design through the development of improvements plans which undergo review by the Engineering Department to ensure consistency with the City's engineering standards. This improvement plan process will include full engineering design (i.e. location, depth, slope, etc.) of all conveyance infrastructure as well as a review of new sewer pump stations and new force mains if needed. Ultimately, the sanitary sewer collection system will be an underground collection system installed as per the City of Clovis standards and specifications.

Therefore, the installation of the wastewater collection and conveyance system infrastructure to serve the proposed Project would have a less than significant impact relative to this topic. The wastewater treatment plant would not require upgrades or improvements in order to serve the proposed Project. Therefore, development of the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site; however, the mix of land uses and zoning would change. These differences would result in slightly different demands for utility services compared to the proposed Project. Demand for utility services would be slightly less, as there would be fewer homes and residents. Overall, this impact would be slightly less when compared to the proposed Project.

REDUCED SPHERE OF INFLUENCE ALTERNATIVE

Aesthetics and Visual Resources

As described in Section 3.1, development of the proposed Project changes the visual character of the Project site, as it would convert the approximately 507-acre Master Plan area from its existing use, which consists of a combination of fallow and grazing land, several rural residences, offices for Contractor's Corp Yard and a small tree nursery. Development of the Master Plan would result in the removal of all existing uses and structures, followed by the future construction of the uses described above, in addition to supporting roadways, utilities and infrastructure, new curbs and gutters, pedestrian and bicycle amenities, landscaping, street lighting, signage and other public and private uses. These impacts related to a change in visual character may be considered "attractive" to one viewer and "unattractive" to other viewers. It is noted that the Clovis General Plan EIR concluded that adoption of the General Plan, which contemplated urbanization of the agricultural lands within the General Plan study area, was a less than significant impact.[4]

There are no designated State Scenic Highways in the vicinity of the Project site. No officially designated State scenic highways are in the City of Clovis. The nearest "eligible" State Scenic Highway to the City is SR 168, which is located over one mile to the south of the Project site at its closest point. Additionally, there are no "eligible" highway segments in the Project vicinity that may be included in the State Scenic Highway system.

The proposed Project would be required to implement existing City regulations aimed at reducing light and glare impacts to ensure that no unusual daytime glare or nighttime lighting is produced. Specifically, the Clovis Development Code states that direct glare shall not be permitted and provides standards for nuisance prevention and shielding requirements. Section 9.22.050 of the Clovis Development Code contains standards and provisions related to exterior lighting. While implementation of regulations and standards within the Clovis Development Code would reduce impacts associated with increased light and glare, the impacts would not be eliminated entirely,

[4] City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

and the overall level of light and glare in the Project site would increase in general as urban development occurs. All proposed outdoor lighting is required to meet applicable City standards regulating outdoor lighting, including 9.22.050 Exterior light and glare of the City's Development code, to minimize any impacts resulting from outdoor lighting on adjacent properties. Implementation of the existing City standards would reduce potential impacts associated with nighttime lighting and light spillage onto adjacent properties to a less than significant level.

Overall, the proposed Project would not substantially impact the visual character or quality of the Project site or its surroundings, damage scenic resources within a State Scenic Highway, or potentially significant new sources of light and glare.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site and has physically the same impacts, although the SOI boundary would be different. Overall, this alternative would not substantially impact the visual character or quality of the Project site or its surroundings, damage scenic resources within a State Scenic Highway, or potentially significant new sources of light and glare. As such, this impact would be largely equal when compared to the proposed Project.

Agricultural Resources

Development of the proposed Project would result in the permanent conversion of approximately 476.24 acres of Farmland of Local Importance, as designated by the California Department of Conservation on the June 2020 Important Farmlands Map and as shown on Figure 3.2-1, to nonagricultural use. After looking at site-specific characteristics more closely for the Project site, it is noteworthy that the Department of Conservation's designations do not accurately and fully consider site specific characteristics such as the lack of any irrigation or crop production on the Project site. To reconcile these facts and analyze the site-specific characteristics more fully, the Clovis General Plan calls for the use of the LESA to evaluate the significance of the agricultural conversion. It is noted that the LESA model was developed by the Department of Conservation, which is the same agency that published the Important Farmland's Map. The proposed Project has a sub score of 25.44 for the Land Evaluation and a sub score of 15 for the Site Assessment, which means the conversion of the land on the Project site is not considered significant according to the California Department of Conservation's established thresholds.

There is one parcel within the Non-development area under a Williamson Act contract. This parcel is not anticipated for any development and no conflict would occur from project approval. There are two parcels within the Master Plan Area with an active Williamson Act contract. The parcels are located within Planning Area (PA) 29. These parcels total 34.17 acres and are part of MPArea 2, which is not anticipated for immediate development. MPArea 2 includes approximately 139 acres controlled by several property owners within the Master Plan, but these areas would be required to have a project-level CEQA analysis when the property owners decide to develop the parcels. Immediate development would have the potential for a conflict because the Williamson Act contract is in effect, however, immediate development is not anticipated for the parcels under a Williamson Act. A Williamson Act contract is a voluntary agreement and the cancellation process is defined in *Williamson Act Cancellation Process, Guide for Local Governments* (California

Department of Conservation 2022). The process can involve a filing of non-renewal and a lapse of the appropriate time, or a standard cancellation with a fee assessment.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site, although the SOI boundary would be different. The exclusion of the SOI expansion outside of the proposed Master Plan from this alternative would have no physical benefits relative to this topic. This alternative would result in the same land conversion as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Air Quality

To achieve attainment with the standards, the SJVAPCD has established thresholds of significance for criteria pollutant emissions. Projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan."

CalEEMod™ (v.2022.1) was used to model operational emissions of the proposed Project. The SJVAPCD has established their thresholds of significance by which the Project emissions are compared against to determine the level of significance. If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for operational-generated emissions, the proposed Project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions to the extent feasible. As shown in Table 3.3-8, the unmitigated operational emissions would exceed the SJVACPD operational thresholds of significance for CO, NOx, ROG, and PM_{10}. Based on this, mitigation measures are required to be implemented to reduce CO, NOx, ROG, and PM_{10} emissions. With implementation of the available feasible mitigation measures (Mitigation Measures 3.3-1 through 3.3-4), the proposed Project's emissions would be reduced. As shown in Table 3.3-9the Project's CO emissions could be reduced to approximately 158.0 tons per year, NOx emissions could be reduced to approximately 28.1 tons per year, and ROG emissions could be reduced to approximately 44.4 tons per year, with the implementation of Mitigation Measures 3.3-1 through 3.3-3 Mitigation Measure 3.3-4 provides for a requirement to reduce emissions to the established Air District thresholds through a variety of options including Rule 9510 Indirect Source Review, a VERA, or another method that can be shown to reduce or offset emissions. The quantity of emission reductions needed for the entire project is 58 tons/year of CO, 18.1 tons/year of NOx, 34.4 tons/year of ROG, and 27.2 tons/year of PM_{10}. However, even with implementation of Mitigation Measures 3.3-1 through 3.3-4, emissions reductions may not be sufficient to ensure a reduction of CO, NOx, ROGs, and PM_{10} to below the applicable Air District criteria pollutant thresholds, as shown in Table 3.3-9.

As shown in Table 3.3-11, Project maximum construction emissions is not expected to exceed the SJVAPCD thresholds of significance with the implementation of existing rules and regulations.

The proposed Project would comply with pre-existing requisite federal, State, SJVAPCD, and other local regulations and requirements, as well as implement the control measures provided by the SJVAPCD for construction-related PM_{10} emissions. Nevertheless, the Project's criteria pollutant

emissions would be considered to have a significant and unavoidable impact.

The Project would not be exposed to substantial nearby sources of TACs and would not generate a significant risk of public exposure to TACs.

These impacts would be similar with the Reduced Sphere of Influence Alternative and has physically the same impacts, although the SOI boundary would be different. This would result in equal operational emissions, and equal construction emissions when compared to the proposed Project.

Biological Resources

As described in Section 3.4, Biological Resources, construction in the Project site has the potential to result in impacts to special-status species in the region. The Project site provides potential habitat for several species, and some are known to exist in the immediate area, including those discussed in Section 3.4. Implementation of Mitigation Measures 3.4-1 through Mitigation Measure 3.4-17 in Section 3.4 would reduce potentially cumulative impacts to a less than significant level. .

These impacts would be similar with the Reduced Density Alternative as this alternative is located on the same site, although the SOI boundary would be different. This alternative would result in the same habitat conversion as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Cultural and Tribal Resources

The Development Area is not located in an area known to have historical and archaeological resources. However, the Cultural Resources Report concludes that there is a moderate potential for buried pre-contact archaeological sites within the Development Area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown historical and archaeological resources. Implementation Mitigation Measure 3.5-1 would ensure that this impact is less than significant. Additionally, while no human remains were found during field surveys of the Project site, implementation of the Mitigation Measure 3.5-1 would ensure that all construction activities, which inadvertently discover human remains implement state-required consultation methods to determine the disposition and historical significance of any discovered human remains. Implementation of Mitigation Measure 3.5-1 would ensure that the potential impact to disturb human remains, including those interred outside of formal cemeteries to a less than significant level.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site, although the SOI boundary would be different. This alternative would result in the same potential to disturb or destroy cultural, historic, archaeological, and tribal resources as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Geology and Soils

As discussed in Section 3.6 Geology and Soils, the Project site does not have a significant risk of becoming unstable as a result landslide, subsidence, soil collapse, liquefaction, liquefaction induced settlement, or lateral spreading. The Project site has a low risk of seismic-related ground failure because of liquefaction. Landslide potential on the Project site is also low to non-existent. While the City is not within an area known for its seismic activity, there will always be a potential for ground shaking caused by seismic activity anywhere in California, including the Project site. Seismic activity could come from a known active fault s in the region. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Additionally, the City of Clovis has incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

Septic tanks or septic systems are not proposed as part of the Project and would not be installed to serve the Master Plan. The Master Plan area would be served by a new connection to the City of Clovis wastewater collection system installed within proposed public utilities easements. The proposed wastewater conveyance facilities would connect to the existing sewer main lines.

The Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are existing regulatory requirements.

The Project site is not expected to contain subsurface paleontological resources, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities. Implementation of Mitigation Measure 3.6-1 would ensure steps would be taken to reduce impacts to paleontological resources if they are discovered during construction, including stopping work in the event potential resources are found, evaluation of the resource by a qualified paleontologist and appropriate handling of any potential resource. This mitigation measure would reduce this impact to a less than significant level.

There are no past or current commercial mining operations within the Project site. Development of the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site, although the SOI boundary would be different. This alternative would result in the same potential for geologic hazards as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Greenhouse Gases, Climate Change and Energy

As presented in Table 3.7-3 in Section 3.7, short-term construction emissions of GHGs are estimated at a maximum of approximately 10,367 MT CO_2e per year. As shown in Table 3.7-4, the annual GHG emissions associated with the proposed Project would be approximately 53,518 MT

CO_2e under the unmitigated scenario, and 52,051 MT CO_2e under the mitigated scenario (i.e., with implementation of the mitigation measures provided in Section 3.3: Air Quality of the Draft EIR). The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the most recent version of the CARB's Scoping Plan, and the SJCOG's 2022 RTP/SCS.

The proposed Project would use energy resources for the operation of Project buildings (electricity), outdoor lighting (electricity), for on-road vehicle trips (e.g. gasoline and diesel fuel) rerouted by the proposed Project and from off-road and on-road construction activities associated with the proposed Project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through statewide and local measures.

The proposed Project would be in compliance with all applicable federal, State, and local regulations regulating energy usage. For example, PG&E, the electric provider to the proposed Project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide RPS to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E has achieved at least a 33percent mix of renewable energy resources in 2020 and is on track to achieve 60percent mix of renewable energy by 2030. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site and has the same land uses and zoning, although the SOI boundary would be different. As such, this impact would be equal when compared to the proposed Project.

Hazards and Hazardous Materials

Site Assessment: Based on the findings of the Phase I ESA and subsequent research and interviews, there was no evidence of controlled recognized environmental conditions (RECs)or historical RECs in connection with the site, as defined by ASTM E 1527-13; however, RECs, American Society for Testing Materials (ASTM) Non-Scope issues and site development issues were identified. However, Section 3.8, Hazards and Hazardous Materials, includes mitigation measure to ensure any impacts related to the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Overall, proposed Project would have a less than significant impact with regards to this environmental issue.

Construction Phase: Further, construction workers and the general public could be exposed to hazards and hazardous materials because of improper handling or use during construction activities (particularly by untrained personnel); transportation accidents; or fires, or other

emergencies. Construction workers could also be exposed to hazards associated with accidental releases of hazardous materials, which could result in significant impacts to the health and welfare of people and/or wildlife. Additionally, an accidental release into the environment could result in the contamination of water, habitat, and countless resources. Compliance with existing regulatory requirements of the Regional Water Quality Control Board would require the preparation of a project specific Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is required to include project specific best management measures that are designed to control erosion and the loss of topsoil to the extent practicable using best management practices (BMPs) that the RWQCB has deemed effective in controlling erosion, sedimentation, and runoff during construction activities.

The proposed Project would also be required to comply with regulations on the transportation of hazardous materials codified in 49 CFR 173 and 49 CFR 177 and CCR Title 26, Division 6. These regulations, which are under the jurisdiction of Caltrans and the California Highway Patrol (CHP), provide specific packaging requirements, define unacceptable hazardous materials shipments, and prescribe safe-transit practices by carriers of hazardous materials. Compliance with these regulations would reduce the risk of exposure to humans and the environment related to the transportation of hazardous materials.

Construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to, CCR Titles 8 and 22, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; and construction vehicles shall be inspected daily for leaks. Off-site activities (e.g., utility construction) would also be required to comply with these regulations. These regulations and codes must be implemented, as appropriate, and are monitored by the State and/or local jurisdictions, including the FCEHS.

Contractors would be required to comply with Cal-EPA's Unified Program; regulated activities would be managed by FCEHS, the designated Certified Unified Program Agency for Fresno County, in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California UFC hazardous material management plans and inventories).

Overall, consistency with federal, State, and local laws and regulations related to the handling of hazardous materials discussed above and implementation of Mitigation Measures 3.8-1 and 3.8-2 would ensure that these potential impacts are reduced to a less than significant level.

Operational Phase: The operational phase of the proposed Project will occur after construction is completed and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes the development of residential structures, which may need to utilize a variety of hazardous materials commonly found in urban areas, including paints, insecticides, detergents, cleaners, and cleaning solvents. If handled appropriately and in compliance with applicable regulations, these materials do not pose a significant risk.

Airports: There are no documented public airports or public use airports within proximity to the Project site.

Emergency Evacuation and Wildfire: In Fresno County, all major roads are available for evacuation, depending on the location and type of emergency that arises. The proposed Project does not include any actions that would impair or physically interfere with any of Fresno County's emergency plans or evacuation routes. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder the emergency vehicle access or evacuation in the event of an emergency. Any construction project that could involve road closures, traffic detours and congestion, shall be required to obtain traffic control plans approved by the City as the lead agency.

The Project site is not categorized as a "Very High" FHSZ by CalFire. The Project site is not located within an LRA and is categorized as Urban Unzoned or Non-Wildland/Non-Urban. The Project site is in an area that is predominately single-family residential uses, which do not pose a significant risk of wildfire.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site, although the SOI boundary would be different. This alternative would result in the same potential for hazards as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Hydrology and Water Quality

Construction: In accordance with the NPDES Stormwater Program, the Project requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and the existing regulatory requirements. Further, the Project would be required to incorporate appropriate erosion and sediment control measures per Section 9.110.040 of the City's Municipal Code and adhere to the City's landscape standards designed to reduce runoff and control soil erosion. Compliance with the Construction General Permit and applicable City grading regulations would ensure that the proposed Project would have a less than significant impact relative to this topic.

Operational: The long-term operations of the proposed Project could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious areas associated with roadways, driveways, and residential structures. The Project site will include construction of a new storm drainage system, which will conform to applicable standards and requirements. The storm drainage collection and detention system will be subject to the State Water Resources Control Board Requirements (SWRCB), the Fresno Metropolitan Flood Control District (FMFCD), and City of Clovis regulations, standards, and specifications. This includes, but not limited to, the municipal NPDES storm water discharge permit, as well as any City required Best Management Practices to control the volume, rate, and potential pollutant load of storm water runoff. BMPs will be implemented through the SWPPP program and compliance

with existing standards and rules, including the implementation of BMPs, would ensure that the proposed Project would have a less than significant impact relative to this topic.

Infiltration/Natural Recharge: The proposed Project would result in new impervious surfaces within the Master Plan area, which could reduce rainwater infiltration and groundwater recharge compared to existing conditions. However, the Project would include open space areas, including landscaped areas and 43 acres of parks, trails, and open space within MPArea 1, which would remain largely pervious. This includes the portion of Big Dry Creek Reservoir Outlet Works Channel that runs through the Project site. Further, areas developed with impervious surfaces would route stormwater into the proposed Project's storm drainage system and to FMFCD facilities designed to retain and infiltrate groundwater, eventually discharging to irrigation canals, creeks, and the San Joaquin River. Furthermore, the City documents the sustainable amount of groundwater that can be extracted from year to year and replenished through naturally occurring groundwater recharge. The City will continue to increase its surface water and recycled water supply usage to a point where groundwater extraction is less than the sustainable yield in a normal year. Therefore, while the proposed Project would result in an increase in the amount of impervious surfaces within the Project site when compared to existing conditions, it is not anticipated that the proposed development would interfere substantially with groundwater recharge.

Stormwater Quality: Stormwater quality standards imposed and monitored by the Environmental Protection Agency (EPA) and the SWRCB through the NPDES permit require treatment of stormwater runoff prior to its release into drainage features. Stormwater quality is an integral part of FMFCD's stormwater management system. With the design and construction of flood control improvements included in the proposed storm drainage system in accordance with FMFCD's requirements, the proposed Project would have a less than significant impact relative to this topic.

Flooding: Most of the Project site is located within an area of minimal flood hazard. A portion of the Project site is located within the 500-year flood zone and a portion of the Project site, within the Big Dry Creek Reservoir Outlet Works Channel (a man-made channel), is within the 100-year flood zone. The portion of the Project site within the 100-year flood zone (associated with Big Dry Creek Reservoir Outlet Works Channel) runs in a southwesterly direction through the center of the Development Area. There are no areas of proposed development within the Project site that are designated as having an increased flood risk due to levee, nor are any these areas located within a regulatory floodway.

Additionally, as discussed in Chapter 3.9-4 of this EIR, the proposed Project is not anticipated to risk release of pollutants due to project inundation, including flooding because of the failure of a levee or dam, seiche, or tsunami. The Project site is approximately 118 miles from the coastline of the Pacific Ocean, which is sufficiently distant to preclude effects from a tsunami. Given the low risk of earthquake-induced seiche and the low water levels of the dam, risks of seiches to the Project site would be low. Furthermore, dam failure is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site, although the SOI boundary would be different. This alternative would result in the same potential for impacts to hydrology and water quality as the proposed Project. As such, this impact would be largely equal when compared to the proposed Project.

Land Use, Population, and Housing

The Project site is located directly north of the City of Clovis limit line and is surrounded by single-family residential, rural residential, a few agricultural orchards, grazing land, and open space land uses. The Project site would result in an extension of developed uses within an area of the City that currently has approved development plans within the vicinity of the Project site. The Project would provide roadways and pedestrian pathways to connect the Project site to the existing circulation system and to allow access to and from the site. Development of the Project site would not result in physical barriers, such as a highway, wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing and planned developments. The proposed Project would have a less than significant impact regarding the physical division of an established community. The proposed Project would not displace substantial numbers of people or existing housing.

Implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted to avoid or mitigate an environmental effect.

The proposed infrastructure improvements would be adequately sized to serve the proposed Project only. The proposed infrastructure would not be oversized to accommodate any growth beyond the Project site into areas that were not previously served. While the proposed Project will result in growth, it is not anticipated to significantly induce growth. Implementation of the proposed Project will have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site and has the same land uses and zoning, although the SOI boundary would be different. As such, this impact would be equal when compared to the proposed Project.

Noise

When comparing existing plus Project levels to existing levels, Shepherd Avenue from Temperence Avenue to Locan Avenue has the potential for significant impact as the only roadway segment with an increase of more than three dB. This segment is in the City of Clovis. The Project will stay within the normally compatible range for single family residential; therefore, this would not be considered an impact.

The Project's proposed residential properties are outside of Shepherd Avenue's 70 dBA CNEL contours. Residences along Shepherd Avenue will be exposed to levels up to 69.4 dBA CNEL at the

property line. These are within the normally compatible levels for residential uses, but above the exterior 65 dBA CNEL standard as outlined in Table ES-1 of the City of Clovis 2014 General Plan.

To meet the exterior residential standards of 65 dBA CNEL, the unshielded residential private yards within 80 feet of the centerline of Shepherd Avenue must be shielded by six-foot sound walls. These walls must be at least 4.2 pounds per square foot (lbs/ft^2). Any unshielded residential glass facades within 80 feet of the centerline of Shepherd Avenue or Sunnyside Avenue directly facing the subject roadway must have an STC rating of 30 or more. This includes any second-floor or taller windows which would not be shielded by the six-foot sound walls.

The proposed Project would include typical residential noise sources which would be compatible with the adjacent existing residential uses (a.k.a. neighborhood traffic, yard equipment, truck deliveries, garbage collected, etc.). The Project's proposed park uses are located internal to the Project site and would not impact off-site residential uses.

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dBA CNEL, or less, will typically comply with the City of Clovis 45 dBA CNEL interior noise level standard. Therefore, this impact would be less than significant.

During the construction of the Project, including roads, water, sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the Project vicinity. Construction noise is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City of Clovis Municipal Code Section 5.27.604. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the Project vicinity.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Noise levels will be the loudest during the grading phase. The modeling assumes construction equipment as close as 25 feet from the adjacent residences and an average of 300 feet away from the adjacent residences. Unmitigated noise levels at 300 feet have the potential to reach 67 dBA L_{eq} and 93 dBA L_{max} at the nearest sensitive receptors during grading. Noise levels for the other construction phases would be lower, approximately from 53 to 66 dBA L_{eq} and 86 to 91 dBA L_{max}.

Noise reduction policies within the General Plan Noise Element and standards within the Municipal Code are provided to further reduce construction noise.

The construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer or other earthmoving/grading equipment, which is calculated to be below the vibration impact threshold.

The Project site is outside the Fresno Yosemite International Airport noise contours and there are no private airstrips, public airports, or public use airports within two miles of the Project site.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site and has the same land uses and zoning, although the SOI boundary would be different. As such, this impact would be equal when compared to the proposed Project.

Public Services and Recreation

The proposed Project will create an increased demand for public services such as police protection, fire services, school services, and recreation compared to existing conditions. To the extent that the Project would have an incremental increase in demand on public services, the Project would be required to pay the impact fees to assure that the current level of service goals of the City are met. Impact fees from new development are collected based upon projected impacts from each development. The adequacy of impact fees is reviewed periodically to ensure that the fee is commensurate with the service. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with police services.

The Project does not propose and would not create a need for new or physically altered public service facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, the Project would not result in adverse physical impacts associated with such facilities.

Although the Project's proposed new open space opportunities would bring the City closer to its goal of parkland for its future residents, it would not provide enough parkland needed to meet the four acres per 1,000 people standard. However, Municipal Code Chapter 3.04, Park Acquisition and Development, states that any developer who plans for dwelling units to be constructed in the City shall pay, in addition to any other fees required to be paid by the City, a fee which shall be calculated on the basis of park acreage designated in the Clovis General Plan consisting of the estimated total land acquisition and construction cost distributed on the basis of the remaining developable area within the sphere of influence. In accordance with the Municipal Code, fees are deposited in specific funds that shall be used solely for the acquisition, improvement and expansion of public parks and recreation facilities as outlined in the park acquisition and improvement fee update. Upon provision and dedication of the proposed parkland and/or payment of required fees in accordance with the Clovis Municipal Code Chapter 3.04, and other Municipal Code policies, the proposed Project will result in a less than significant impact.

The proposed Project would not significantly increase the use of an existing park, or other recreational facility. Therefore, it is not anticipated that any substantial physical deterioration of existing facilities would occur or be accelerated. As such, the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site and has the same land uses and zoning, although the SOI boundary would be different. As such, this impact would be equal when compared to the proposed Project.

Transportation and Circulation

The Project VMT per capita is approximately 116 percent higher than Fresno County's VMT per capita threshold and approximately 99 percent higher than the VMT per employee threshold. Project design features aim to promote overall mobility with the goal of reducing VMT and reducing greenhouse gas emissions. Implementation of these Project design features may possibly reduce the Project's VMT. The Project design features can help offset some of the VMT impacts of the Project. Because the development would generate vehicle travel exceeding 13 percent below the established regional average under Existing and Cumulative Conditions, even with implementation of Project Design measures that provide mitigating effects, development of the proposed Project would result in a significant and unavoidable impact.

The City of Clovis Active Transportation Plan (2022) and City of Clovis General Plan (2014) were reviewed to determine if the proposed Project results in any inconsistencies with adopted transportation related policies, and the Project is not anticipated to conflict with policies, plans, and programs addressing the circulation system for alternative modes.

Buildout of the proposed Master Plan would result in some changes to the City's circulation network in the vicinity of the project but would not increase hazards or incompatible uses due to design features. Roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, and would have to meet design guidelines such as the accessibility requirements of Title 24 (California Building Code), ADA and PROWAG standards, California Manual of Uniform Traffic Control Devices (MUTCD), and the Caltrans Roadway Design Manual. Therefore, development of the proposed Project would not result in a conflict with an existing or planned pedestrian facility, bicycle facility, or transit service/facility.

These impacts would be similar with the Reduced Sphere of Influence Alternative, as this alternative is located on the same site and has the same land uses and zoning, although the SOI boundary would be different. As such, this impact would be equal, which is would still result in a significant and unavoidable impact, when compared to the proposed Project.

Utilities

The proposed Project would increase the amount of wastewater requiring treatment. According to the City's 2017 Wastewater Master Plan Update, single-family residential uses are estimated to generate 55 gallons per capita per day or 175 gallons per day per equivalent dwelling unit (edu) for single family residential land uses and 142 gallons per day edu for multi-family residential units. The Project site includes up to 3,268 single- and multi-family residential units. Using the more conservative rate which assumes that the Project would only develop single-family residential uses, the proposed Project would generate approximately 575,050 gallons per day (or 0.575 mgd) of wastewater. Hydraulic modeling updates represent more flexibility in construction

and unit types, which estimated the Project's average dry weather flow at approximately 0.513 mgd of wastewater. Occupancy of the proposed Project would be prohibited without sewer allocation. An issuance of sewer allocation from the City's available capacity would ensure that there would be a final determination by the wastewater treatment and/or collection provider that there is adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the Regional Water Reclamation Facility (RWRF) with a subsequent allocation of capacity to the proposed Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments.

The City of Clovis Water Reuse Facility is currently in compliance with the WDR requirements of Order No. 5-2019-0021 NPDES NO. CA0085235. The projected flows of the proposed Project are not expected to exceed the treatment capacity available for treatment. Full buildout of the proposed Project would slightly increase the existing treatment demand at the RWRF. As described above, the City must also periodically review and update their Utility Master Plans, including the Wastewater Master Plan, and as growth continues to occur within the City, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. These pre-existing proactive efforts ensure the City would be able to reliably treat the wastewater as the community expands its population up to and through the next plant expansion, including with development of the proposed Project.

A majority of the Master Plan has been planned for urban uses and is identified in the City's General Plan as being located within the Northeast Urban Center and specifically, within Focus Area 13. As such, the Master Plan has been anticipated for potential development. Given that projected wastewater generation volumes associated with the buildout of the Master Plan would not exceed the projected wastewater generation volumes described in the Wastewater Master Plan and the Urban Water Management Plan, as described under Impact 3.14-1. Development of the proposed Project would have a less than significant impact relative to this topic.

The wastewater collection and conveyance system that will serve the proposed Project will consist of engineered infrastructure consistent with the City's existing infrastructure requirements. New wastewater collection and conveyance infrastructure needed for the proposed Project will require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients. The applicant will refine the wastewater collection/conveyance infrastructure design through the development of improvements plans which undergo review by the Engineering Department to ensure consistency with the City's engineering standards. This improvement plan process will include full engineering design (i.e. location, depth, slope, etc.) of all conveyance infrastructure as well as a review of new sewer pump stations and new force mains if needed. Ultimately, the sanitary sewer collection system will be an underground collection system installed as per the City of Clovis standards and specifications.

Therefore, the installation of the wastewater collection and conveyance system infrastructure to serve the proposed Project would have a less than significant impact relative to this topic. The

wastewater treatment plant would not require upgrades or improvements in order to serve the proposed Project. Therefore, development of the proposed Project would have a less than significant impact relative to this topic.

These impacts would be similar with the Reduced Sphere of Influence Alternative as this alternative is located on the same site and has the same land uses and zoning, although the SOI boundary would be different. As such, this impact would be equal when compared to the proposed Project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project (No Build) Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed Project.

As Table 5.0-1 presents a comparison of the alternative Project impacts with those of the proposed Project. As shown in the table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project (No Build) Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. Therefore, the Reduced Density Alternative would be the environmentally superior alternative because all environmental issues would have reduced impacts compared to the proposed Project. It is noted that the Reduced Density Alternative does not fully meet all of the Project objectives. The following three project objectives are not fully met:

- Provide residential housing opportunities that are visually attractive and accommodate the future housing demand in Clovis.
- Refine the mixture of housing types, sizes and densities that collectively provide for local and regional housing demand.
- Consider affordability and housing diversity by developing residential uses that are proximate to urban services and roadways and varied in size and density.

Under the Reduced Density Alternative, there would be downzoning throughout the Master Plan Area (MPArea 1 and MPArea 2) to very low residential density. The total unit count would decrease from 3,286 under the proposed Master Plan to a total of 854 under the Reduced Density Alternative. The objectives listed above would satisfy and implement the City General Plan. Land Use Element Policy 3.6, Mix of housing types and uses, encourages development which provides a mix of housing types, unit sizes, and densities at the block level. Land Use Element Policy 5.1, Housing variety in developments, plans for the provision of a variety of housing product types suitable, where each development should contribute to a diversity of housing sizes and types within the standards appropriate to the land use designation. Therefore, the Reduced Density Alternative is not consistent with the City General Plan Land Use Element.

The second objective listed above is also consistent with the City requirements in the latest Regional Housing Needs Analysis (RHNA). In light of the Legislature's repeated determinations in recent years that California is facing a statewide housing crisis, State has provided the City with good reason to exercise its legislative discretion to facilitate the construction of new housing. Government Code section 65889.5, subdivision (a)(1)(A), states that "[t]he lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." Subdivision (a)(1)(D) of that section adds that "[m]any local governments do not give adequate attention to the economic, environmental, and social costs of decisions that result in disapproval of housing development projects, reduction in density of housing projects, and excessive standards for housing development projects." The Reduced Density Alternative would result in 2,432 fewer units then the proposed Project, which is not consistent with Legislature's guidance for solving California statewide housing crisis.

TABLE 5.0-1: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	*NO PROJECT (NO BUILD) ALTERNATIVE*	*INCREASED DENSITY MIXED USE ALTERNATIVE*	*REDUCED DENSITY ALTERNATIVE*	*REDUCED SPHERE OF INFLUENCE ALTERNATIVE*
Aesthetics and Visual Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Agricultural Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Air Quality	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Biological Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Cultural and Tribal Resources	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Geology and Soils	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Greenhouse Gases, Climate Change and Energy	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Hazards and Hazardous Materials	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Hydrology and Water Quality	Less (Best)	Equal (2nd Best)	Equal (2nd Best)	Equal (2nd Best)
Land Use, Population, and Housing	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Noise	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Public Services and Recreation	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Transportation and Circulation	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)
Utilities	Less (Best)	Greater (4th Best)	Less (2nd Best)	Equal (3rd Best)

GREATER = GREATER IMPACT THAN THAT OF THE PROPOSED PROJECT

LESS = LESS IMPACT THAN THAT OF THE PROPOSED PROJECT

EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE PROPOSED PROJECT

This Page Intentionally Left Blank.

CITY OF CLOVIS

McKencie Perez, MPA ..... Senior Planner

Dave Merchen ..... City Planner

Sean Smith, PE ..... Supervising Civil Engineer

DE NOVO PLANNING GROUP

Steve McMurtry ..... Principal Planner/Project Manager

Christine Abraham ..... Principal Planner

Elise Carroll ..... Senior Planner

Josh Smith ..... Senior Planner

Eric Anderson ..... Associate Planner

Jeff Setterlund ..... Associate Planner

Jennifer De Martino ..... GIS Manager

Ziqian Yin ..... GIS Analyst

KITTELSON & ASSOCIATES

Mike Aronson, PE ..... Senior Principal Engineer

Aaron Elias, PE ..... Associate Engineer

MD ACOUSTICS – NOISE CONSULTANT

Mike Dickerson, INCE ..... Principal

Claire Pincock, INCE ..... Consultant

PROVOST & PRITCHARD – WATER SUPPLY CONSULTANT

Heather Bashian, PE ..... Principal

REDTAIL CONSULTING – BIOLOGICAL CONSULTANT

Anna Buising, PhD, PG ..... Principal Project Manager

This page intentionally left blank.

Aerosol Science and Technology. 2011. Thomas A. Cahill, David E. Barnes, Nicholas J. Spada, Jonathan A. Lawton, and Thomas M. Cahill. Very Fine and Ultrafine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003-2007. July 13, 2011.

Akel Engineering Group, Inc., Technical Memorandum, Wastewater Hydraulic Modeling Study, Vista Ranch Development, Final. May 2024.

Amec Foster Wheeler, Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018.

Association of Environmental Professionals. 2024 California Environmental Quality Act (CEQA) Statute and Guidelines.

Atmospheric Environment. 2016. Thomas A. Cahill, David E. Barnes, Leann Wuest, David Gribble, David Buscho, Roger S. Miller, Camille De la Croix. Artificial Ultra-fine Aerosol Tracers for Highway Transect Studies. April 7, 2016.

Barnes, C.L. (U.S. Army Corps of Engineers). Pers. comms. Emails with Anna Buising (Redtail Consulting), April 26 – May 2, 2024. On file with Redtail Consulting, Fremont, CA.

Bay Area Air Quality Management District, Ultrafine Particulate Matter. Available at: https://www.baaqmd.gov/about-air-quality/air-quality-measurement/special-air-monitoring-projects/special-reports/ultrafine-particulate-matter?sc_lang=en&switch_lang=true. Accessed April 2024.

Blair, Church & Flynn Consulting Engineers, Wastewater Collection System Master Plan, Master Plan Update Phase 3. April 2017. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2017-Draft-Wastewater-Master-Plan.pdf. Accessed February 2024.

Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. April 29. Available at: https://archive.gov.ca.gov/archive/gov39/2015/04/29/news18938/index.html#:~:text=Governor%20Edmund%20G.-,Brown%20Jr.,next%20decade%20and%20a%20half. Accessed April 2024.

California Air Pollution Control Officers Association, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Designed for Local Governments, Communities, and Project Developers, Final Draft. December 2021. Available at: https://www.airquality.org/ClimateChange/Documents/Final%20Handbook_AB434.pdf. Accessed April 2024.

7.0 REFERENCES

California Air Resources Board, 2022 Scoping Plan Documents. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed April 2024.

California Air Resources Board, Aerometric Data Analysis and Management System (or iADAM) Air Pollution Summaries.

California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective. 2005. Available at: https://ww3.arb.ca.gov/ch/handbook.pdf. Accessed April 2024.

California Air Resources Board, California Ambient Air Quality Standards. Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed April 2024.

California Air Resources Board, First Update to the Climate Change Scoping Plan. 2014. Available at: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed April 2024.

California Building Code 2022. Available at: https://up.codes/viewer/california/ca-building-code-2022. Accessed February 2022.California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification, and Work Practices for Lead-Based Paing and Lead Hazards. Available at: https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/CDPH%20Document%20Library/Title%2017.pdf. Accessed February 2024.

California Code of Regulations, Cal/OSHA – Title 8 Regulations, Division 1, Chapter 4, Subchapter 3, Article 10, Section 1270, Fire Prevention. Available at: https://www.dir.ca.gov/title8/1270.html. Accessed January 2024.

California Code of Regulations, Cal/OSHA – Title 8 Regulations, Subchapter 15, Article 5, Section 6773, Fire Protection and Fire Fighting Equipment. Available at: https://www.dir.ca.gov/title8/6773.html. Accessed January 2024.

California Code of Regulations, Title 19 – Public Safety, Division 1 – State Fire Marshal. Available at: https://regulations.justia.com/states/california/title-19/division-1/. Accessed February 2024.

California Code of Regulations, Title 26 – Toxics. Available at: https://regulations.justia.com/states/california/title-26/. Accessed February 2024.

California Department of Conservation, 2016-2018 Farmland Conversion Report. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/2016-2018_Farmland_Conversion_Report.aspx. Accessed March 2024.

California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), An Explanatory Text to Accompany the Fault Activity Map of California. 2010. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/FAM_phamplet.pdf. Accessed February 2024.

California Department of Conservation, California Geological Survey, CGS Note 54. Available at: https://www.conservation.ca.gov/cgs/documents/publications/cgs-notes/CGS-Note-54-SoCal-Regulatory-Earthquake-Hazard-Zones-a11y.pdf. Accessed February 2024.

California Department of Conservation, California Geological Survey, California Geomorphic Provinces, Note 36. December 2002. Available at: https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf. Accessed February 2024.

California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 2024.

California Department of Conservation, Farmland Mapping and Monitoring Program. Available at: https://www.conservation.ca.gov/dlrp/fmmp. Accessed March 2024.

California Department of Conservation, California Geological Survey, Fault Activity Map of California. Available at: https://maps.conservation.ca.gov/cgs/fam/. Accessed February 2024.

California Department of Conservation, California Geological Survey, Special Publication 42. Revised 2018. Available at: https://www.conservation.ca.gov/cgs/documents/publications/special-publications/SP_042-a11y.pdf. Accessed February 2024.

California Department of Conservation, California's Minerals. Available at: https://www.conservation.ca.gov/cgs/minerals. Accessed February 2024.

California Department of Conservation, California Seismic Hazard Zones. Available at: https://www.conservation.ca.gov/cgs/shma. Accessed February 2024.

California Department of Conservation, Division of Mines and Geology, Special Report 158, Mineral Lands Classification: Aggregate Materials in the Fresno Production-Consumption Region. 1988. Available at: https://www.conservation.ca.gov/smgb/guidelines/documents/classdesig.pdf. Accessed February 2024.

California Department of Conservation, Mineral Resources Program: Mapping California's Mineral Resources and Mineral Hazards. Available at:

https://www.conservation.ca.gov/cgs/minerals/storymap?utm_source=minerals+page&utm_medium=referral&utm_campaign=minerals+storymap. Accessed February 2024.

California Department of Conservation, Williamson Act Program, 2022. Available at: https://www.conservation.ca.gov/dlrp/lca. Accessed March 2024.

California Department of Education, DataQuest, 2023 Enrollment by Grade, Clovis Unified Report (10-62117). Available at: https://dq.cde.ca.gov/dataquest/dqcensus/enrgrdlevels.aspx?agglevel=District&year=2022-23&cds=1062117. Accessed January 2024.

California Department of Health Care Services, California Code of Regulations (CCR), Title 22. Available at: https://www.dhcs.ca.gov/services/adp/Pages/CA_Code_Regulations.shtml.aspx. Accessed February 2024.

California Department of Conservation, California Geological Survey, Landslides. Available at: https://www.conservation.ca.gov/cgs/landslides. Accessed February 2024.

California Department of Conservation, Division of Oil, Gas and Geothermal Resources, DOC Maps: Geologic Energy Management Division, Data Viewer, Well Finder, Data Search. Available at: https://maps.conservation.ca.gov/doggr/#webmaps. Accessed February 2024.

California Department of Conservation, Mines Online. Available at: https://maps.conservation.ca.gov/mol/index.html. Accessed February 2024.

California Department of Conservation, SMARA Statutes and Regulations. Available at: https://www.conservation.ca.gov/dmr/lawsandregulations. Accessed February 2024.

California Department of Education, DataQuest, 2023 Enrollment by Grade, Clovis Unified Report (10-62117). Available at: https://dq.cde.ca.gov/dataquest/dqcensus/enrgrdlevels.aspx?agglevel=District&year=2022-23&cds=1062117. Accessed January 2024.

California Department of Education, School Site Selection and Approval Guide. Available at: https://www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp. Accessed January 2024.

California Department of Finance, Estimates-E1, Population and Housing Estimates for Cities, Counties, and the State – January 1, 2022 and 2023. https://dof.ca.gov/forecasting/demographics/estimates-e1/. Accessed January 2024.

California Department of Finance, E-4 Population Estimates for Cities, Counties, and the State, 2001-2010, with 2000 & 2010 Census Counts. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e4-2000-2010/. Accessed January 2024.

California Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2021-2023 with 2020 Censes Benchmark. Available at: https://dof.ca.gov/forecasting/demographics/estimates/e-4-population-estimates-for-cities-counties-and-the-state-2021-2023-with-2020-census-benchmark/. Accessed January 2024.

California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2020/. Accessed January 2024.

California Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties and the State, 2000-2010. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e8-2000-2010/. Accessed January 2024.

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols. Accessed: April 2024.

California Department of Fish and Wildlife. 2015. Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols. Accessed: April 2024.

California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols. Accessed: April 2024.

California Department of Fish and Wildlife. 2023a. California Natural Community List. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398. Downloaded: April 2024.

California Department of Fish and Wildlife. 2023b. Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols. Accessed: April 2024.

California Department of Fish and Wildlife. 2024. Natural Communities. Available: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed: April 2024.

California Department of Forestry and Fire Protection, Fire Hazard Severity Zones in State Responsibility Areas, September 29, 2023. Data Search. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed February 2024.

California Department of Forestry and Fire Protection, Frequently Asked Questions About 2020 Fire Hazard Severity Zones. Available at: https://bof.fire.ca.gov/media/ttpi3n3m/full-14-b-vhfhsz-frequently-asked-questions.pdf. Accessed February 2024.

7.0 REFERENCES

California Department of Industrial Relations, Cal/OSHA – Title 8 Regulations – Table of Contents. Available at: https://www.dir.ca.gov/samples/search/query.htm. Accessed February 2024.

California Department of Pesticide Regulation. California Code of Regulations (Title 3, Food and Agriculture), Division 6. Pesticides and Pest Control Operations. Available at: https://www.cdpr.ca.gov/docs/legbills/calcode/chapter_.htm. Accessed February 2024.

California Department of Resources Recycling and Recovery (CalRecycle), Jurisdiction Review Reports. Available at: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed February 2024.

California Department of Resources Recycling and Recovery, RDRS Report 2: Jurisdiction Disposal and Beneficial Reuse by Destination. Available at: https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial. Accessed February 2024.

California Department of Resources Recycling and Recovery, SWIS Facility/Site Activity Details: City of Clovis Landfill (10-AA-0004). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4529?siteID=347. Accessed February 2024.

California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: Fairmead Solid Waste Disposal Site (20-AA-0002). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3028?siteID=1701. Accessed February 2024.

California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Activity Details: American Avenue Disposal Site (10-AA-0009). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4535?siteID=352. Accessed February 2024.

California Department of Toxic Substances Control, EnviroStor, Data Search. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=clovis%2C+ca. Accessed February 2024.

California Department of Transportation, California Scenic Highway Map System. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed January 2024.

California Department of Transportation, Division of Aeronautics, California Public Utilities Code, Section 21001 et seq. relating to the State Aeronautics Act, March 2019. Available at: https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/puc_ssa_r3_2019.pdf. Accessed February 2024.

California Department of Transportation, Geotechnical Manual, Collapsable Soil. February 2024. Available at: https://dot.ca.gov/-/media/dot-media/programs/engineering/documents/geotechnical-services/202402-gm-collapsiblesoil-a11y.pdf. Accessed February 2024.

California Department of Transportation, Guidance Manuals, Caltrans Vibration Guidance Manual. 2020. Available at: https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals. Accessed April 2024.

California Department of Transportation. Highway Design Manual (HDM). Available at: https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm. Accessed April 2024.

California Department of Transportation, Scenic Highways, California State Scenic Highways. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed January 2024.

California Department of Transportation, Scenic Highways – Frequently Asked Questions. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways/lap-liv-i-scenic-highways-faq2. Accessed January 2024.

California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol. September 2013. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed April 2024.

California Department of Transportation, Traffic Volumes. 2017 Traffic Volumes: Route 99. Available at : https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017/route-99. Accessed April 2024.

California Department of Water Resources, Bulletin 118 Groundwater Basin Lookup. Available at: https://dwr.maps.arcgis.com/apps/Styler/index.html?appid=740d10eefd6148579321a3abcd065a36. Accessed February 2024.

California Department of Water Resources, California's Groundwater (Bulletin 118), San Joaquin Valley Groundwater Basin Kings Subbasin. October 2003 (revised January 2006). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_01_EasternSanJoaquinSubbasin.pdf. Accessed February 2024.

California Department of Water Resources, California's Groundwater Live, Continuous GPS Stations. Available at: https://dwr.maps.arcgis.com/apps/dashboards/213fcb302b5d413499b2495b2c6080e5. Accessed February 2024.

7.0 REFERENCES

California Department of Water Resources, Jurisdictional Sized Dams. Available at: https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams/Jurisdictional-Sized-Dams. Accessed February 2024.

California Department of Water Resources, SGMA Basin Prioritization Dashboard. Available at: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed February 2024.

California Energy Commission, 2025 Building Energy Efficiency Standards. Available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency. Accessed April 2024.

California Energy Commission, Building Energy Efficiency Standards for Residential and Nonresidential Buildings, August 2022. Available at: https://www.energy.ca.gov/sites/default/files/2022-12/CEC-400-2022-010_CMF.pdf. Accessed January 2024.

California Food and Agriculture Code, Division 6. Pest Control Operations. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=FAC&division=6.&title=&part=&chapter=&article=&nodetreepath=7. Accessed February 2024.

California Government Code, Section 66477, Quimby Act. Available at: https://casetext.com/statute/california-codes/california-government-code/title-7-planning-and-land-use/division-2-subdivisions/chapter-4-requirements/article-3-dedications/section-66477-payment-of-fees-for-park-and-recreational-purposes-as-condition-of-approval#:~:text=2023%20Legislative%20Session.-,Section%2066477%20%2D%20Payment%20of%20fees%20for%20park%20and%20recreational%20purposes,or%20recreational%20purposes%20as%20a. Accessed January 2024.

California Government Code, Title 7, Division 1, Planning and Land Use, Chapter 4.9, Section 65995, 2022. Available at: https://law.justia.com/codes/california/2022/code-gov/title-7/division-1/chapter-4-9/section-65995/#:~:text=The%20amount%20of%20the%20square,county%20in%20calculating%20structural%20perimeters. Accessed January 2024.

California Government Code, Title 7, Planning and Land Use, Division 1. Planning and Zoning, Chapter 3. Local Planning, Article 5. Authority for and Scope of General Plans [65300 – 65303.4]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=7.&part=&chapter=3.&article=5. Accessed February 2024.

California Health and Safety Code, Division 11, Explosives [12000 – 12761]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=11.&title=&part=&chapter=&article=&nodetreepath=19. Accessed February 2024.

California Health and Safety Code, Division 12, Fires and Fire Protection [13000 – 14959]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=12.&title=&part=&chapter=&article=&nodetreepath=20. Accessed February 2024.

California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control [25100 – 25259]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=20.&title=&part=&chapter=6.5.&article=. Accessed February 2024.

California Health and Safety Code, Division 26, Air Resources [39000 – 44475.3]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=26.&title=&part=&chapter=&article=&nodetreepath=32. Accessed February 2024.

California Highway Patrol, HPH 84.3, Explosive Materials Shipments: Routes, Safe Stopping Places, and Safe Parking Places. Revised May 2021. California Vehicle Code, Division 14, Transportation of Explosives. Available at: https://www.chp.ca.gov/CommercialVehicleSectionSite/Documents/HPH_84_3_rev0521.pdf. Accessed February 2024.

California Invasive Plant Council. 2018. Invasive Plant Checklist for California Landscaping. Available: https://www.cal-ipc.org/solutions/prevention/landscaping/. Downloaded: March 2024.

California Legislative Information, California Government Code Section 65300. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=7.&part=&chapter=3.&article=5. Accessed January 2024.

California Legislative Information, California Government Code 65584.09. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65584.09&lawCode=GOV. Accessed January 2024.

California Legislative Information, California Government Code Section 65800. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65800.&lawCode=GOV. Accessed January 2024.

California Legislative Information, California Vehicle Code, Division 14 – Transportation of Explosives [Section 31600–31620]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=VEH&division=14.&title=&part=&chapter=&article=. Accessed February 2024.

California Legislative Information, Senate Bill No. 50, Chapter 407. Available at: http://www.leginfo.ca.gov/pub/97-98/bill/sen/sb_0001-0050/sb_50_bill_19980827_chaptered.pdf. Accessed January 2024.

California Legislative Information, Senate Bill No. 330. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB330. Accessed January 2024.

California Native Plant Society. *n.d.* California Rare Plant Ranks. Available: https://www.cnps.org/rare-plants/california-rare-plant-ranks. Accessed: March 2024.

California Office of Emergency Services, Standardized Emergency Management System. Available at: https://www.caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/planning-preparedness/standardized-emergency-management-system/. Accessed January 2024.

California Office of Environmental Health Hazard Assessment, 2022 Report: Indicators of Climate Change in California. Available at: https://oehha.ca.gov/climate-change/epic-2022. Accessed April 2024.

California Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts in CEQA. April 2018. Available at: https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf. Accessed April 2024.

California Governor's Office of Planning and Research, CEQA Transportation Impacts (SB 743). 2013. Available at: https://opr.ca.gov/ceqa/sb-743/#:~:text=SB%20743%20(Steinberg%2C%202013),more%20options%20to%20drive%20less. Accessed April 2024.

California Public Resources Code, Division 4. Forests, Forestry and Range and Forage Lands, Part 2. Protection of Forest, Range and Forage Lands, Chapter 2. Hazardous Fire Areas [4251 – 4290.5]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=2.&article=. Accessed February 2024.

California Regional Water Quality Control Board, Waste Discharge Requirements and Master Recycling Permit for the City of Clovis, Sewage Treatment and Water Reuse Facility, Fresno County (Order R5-2019-0021, NPDES No. CA0085235). https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/fresno/r5-2019-0021.pdf. Accessed March 2024.

California State Assembly Committee on Local Government, Guide to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. December 2023. Available at: https://calafco.org/sites/default/files/resources/CKH-Guides/CKH%20GUIDE%20-%202023%20-%20linked.pdf. Accessed January 2024.

California State Mining and Geology Board, Executive Officer's Report. February 10, 2011. Available at:

https://www.conservation.ca.gov/smgb/agendas/Documents/Staff_Reports/2011/RBM%200210-9%20AB%203098.pdf. Accessed February 2024.

California State Mining and Geology Board, Guidelines for Classification and Designation of Mineral Lands. Available at: https://www.conservation.ca.gov/smgb/guidelines/documents/classdesig.pdf. Accessed February 2024.

California State Water Resources Control Board, California 2020-2022 Integrated Report (303(d) List/305(b) Report). Available at: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html. Accessed February 2024.

California State Water Resources Control Board, Final Staff Report, 2020-2022 Integrated Report for Clean Water Act Sections 303(d) and 305(b). Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2020_2022state_ir_reports_revised_final/2020-2022-integrated-report-final-staff-report.pdf. Accessed February 2024.

California State Water Resources Control Board, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit), Order WQ 2022-0057-DWQ, NPDES No. CAS00002. September 2022. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/docs/2022-0057-dwq-with-attachments/cgp2022_order.pdf. Accessed February 2024.

California Water Code, Division 7. Water Quality [13000 – 16104]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=WAT&division=7.&title=&part=&chapter=&article=&nodetreepath=8. Accessed February 2024.

CalRecycle, Title 14, Natural Resources – Division 7. Available at: https://calrecycle.ca.gov/laws/regulations/title14. Accessed February 2024.

CalRecycle, Title 27, Environmental Protection – Division 2, Solid Waste. Available at: https://calrecycle.ca.gov/laws/regulations/title27/. Accessed February 2024.

Centers for Disease Control and Prevention. CDC WONDER. Available at: http://wonder.cdc.gov. Accessed April 2024.

Central Valley Regional Water Quality Control Board. 2018. Water Quality Control Plan for the Tulare Lake Basin, Third Edition. (May.) Available: https://www.waterboards.ca.gov/rwqcb5/water_issues/basin_plans/tularelakebp_201805.pdf. Downloaded: April 2024.

City of Clovis, About Clovis FD. 2023. Available at: https://cityofclovis.com/fire/about-fd/. Accessed January 2024.

7.0 REFERENCES

City of Clovis, Active Transportation Plan. September 2023. Available at: https://cityofclovis.com/wp-content/uploads/PDS-Active-Transportation-Plan-Final-2023.pdf. Accessed April 2024.

City of Clovis, City of Clovis Recreation. Available at: https://cityofclovis.com/general-services/recreation/. Accessed January 2024.

City of Clovis, Clovis Fire Department, Annual Report, 2022. Available at: https://cityofclovis.com/wp-content/uploads/2023/03/2022-Annual-Report.pdf. Accessed January 2024.

City of Clovis, Clovis Fire Department, FAQ. Available at: https://cityofclovis.com/fire/about-fd/fire-faq/. Accessed January 2024.

City of Clovis, General Plan and Development Code Update Draft EIR. June 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-01-Aesthetics.pdf. Accessed January 2024.

City of Clovis, Parks Master Plan, March 2018. Available at: https://cityofclovis.com/wp-content/uploads/2019/05/Clovis-Parks-Master-Plan-Final-3_19-18.pdf. Accessed January 2024.

City of Clovis, Senior Services, Senior Activity Center. Available at: https://cityofclovis.com/general-services/senior-services/. Accessed January 2024.

City of Clovis Department of Planning and Development Services, 2014 Master Service Update Plan. 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/2014-Master-Service-Plan.pdf. Accessed January 2024.

City of Clovis General Plan. 2014. Available at: https://cityofclovis.com/wp-content/uploads/2018/10/Clovis-General-Plan-2014.pdf. Accessed January 204.

City of Clovis Municipal Code. Available at: https://www.codepublishing.com/CA/Clovis/. Accessed January 2024.

City of Clovis Recreation. Available at: https://cityofclovisrecreation.com/home. Accessed January 2024.

City of Clovis Zoning Map. Available at: https://cityofclovis.com/planning-and-development/planning/zoning/. Accessed January 2024.

City of Fresno, Department of Transportation, FAX: Fresno Area Express. Available at: https://www.fresno.gov/transportation/fax/. Accessed April 2024.

Clovis Police Department End of Year Report, 2022. Available at: https://cityofclovis.com/wp-content/uploads/2023/03/END-OF-YEAR-REPORT-2022-Public.pdf. Accessed January 2024.

Clovis Police Department Report to the Community, 2022. Available at: https://cityofclovis.com/wp-content/uploads/2023/11/TD_CPD_Report-to-the-Community_2022_DRAFT-1.pdf. Accessed January 2024.

Clovis Transit. Available at: https://clovistransit.com/. Accessed April 2024.

Clovis Unified School District, 2023 Report to the Community. Available at: https://www.cusd.com/AnnualReport.aspx. Accessed January 2024.

Clovis Unified School District, Clovis Boundary Map. Available at: https://maps.cusd.com/address/. Accessed February 2024.

Clovis Unified School District. Developer Fees. Available at: https://www.cusd.com/DeveloperFees.aspx. Accessed January 2024.

Code of Federal Regulations, Title 14, Federal Aviation Regulations. Available at: https://www.ecfr.gov/current/title-14. Accessed February 2024.

Community Medical Centers, About Us. Available at: https://www.communitymedical.org/about-us. Accessed January 2024.

Community Medical Centers, Locations, Clovis Community Medical Center. Available at: https://www.communitymedical.org/locations/clovis-community-medical-center. Accessed January 2024.

County of Fresno, Department of Agriculture and Weights and Measures, Fresno County 2022 Crop Report. Available at: fresnocountyca.gov/files/sharedassets/county/v/1/agricultural-commissioner/ag-crop-reports/2022-ag-crop-report-optimized.pdf. Accessed March 2024.

County of Fresno, ESAP Waste Haulers. Available at: https://gisportal.co.fresno.ca.us/portal/apps/webappviewer/index.html?id=9eb6f60acbce4565a634a931a9cc6f42. Accessed February 2024.

ECORP Consulting, Inc., Biological Resources Assessment for the Triangle Property, Fresno County, California. January 23. 2023 (Revised).ECORP Consulting, Inc., Cultural Resources Inventory Report, Triangle Property Project, Fresno County, California. January 2023.

Energy and Environmental Economics, Pathways to Deep Carbonization in the United States. 2015. Available at: https://biotech.law.lsu.edu/blog/US-Deep-Decarbonization-Report.pdf. Accessed April 2024.

Federal Aviation Act of 1958, Public Law 85-726, August 23, 1958. Available at: https://www.govinfo.gov/content/pkg/STATUTE-72/pdf/STATUTE-72-Pg731.pdf. Accessed February 2024.

7.0 REFERENCES

Federal Emergency Management Agency, Flood Insurance Rate Map, Map Numbers 06019C1585H, 06019C1580H, 06019C1045H, and 06019C1040H. February 2009. Available at: https://msc.fema.gov/portal/search. Accessed February 2024.

Fresno-Clovis Storm Water Quality Management Program. November 2013. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Stormwater-Quality-Management-Plan.pdf. Accessed February 2024.

Fresno Council of Governments, About Fresno COG. Available at: https://fresnocog.org/about-cog/. Accessed January 2024.

Fresno Council of Governments, Fresno County Congestion Management Process Update. September 2017. Available at: https://www.fresnocog.org/wp-content/uploads/publications/CMP-report-Sept-2017_final.pdf. Accessed April 2024.

Fresno Council of Governments, Fresno County Regional Housing Needs Allocation Plan. Available at: https://www.fresnocog.org/project/fresno-county-regional-housing-needs-allocation-plan/. Accessed January 2024.

Fresno Council of Governments, 2021 Regional Safety Plan, Local Road Safety Plan. Available at: https://www.fresnocog.org/project/2021-regional-safety-plan-local-road-safety-plan/. Accessed April 2024.

Fresno Council of Governments, Plan Fresno, 2022 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://www.planfresno.com/sustainable-communities-strategies-fall-outreach/. Accessed January 2024.

Fresno County Code of Ordinances. Title 17, Chapter 17.48, Design and Improvement Standards. Available at: https://library.municode.com/ca/fresno_county/codes/code_of_ordinances?nodeId=TIT17DILA_CH17.48DEIMST_17.48.020RODEAY. Accessed January 2024.

Fresno County Department of Public Health, CUPA Solid Waste Resource List. 2021. Available at: https://www.fresnocountyca.gov/files/assets/county/public-health/environmental-health/cupa-solid-waste-resource-list-6-8-2021.xlsx. Accessed February 2024.

Fresno County Department of Public Works, County of Fresno General Plan Review & Zoning Ordinance Update. Available at: https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/development-services-division/planning-and-land-use/general-plan-review-zoning-ordinance-update. Accessed January 2024.

Fresno County Department of Public Works and Planning, Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update, Fresno County, California, April 2023. Available at:

https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/planning-and-land-use/general-plan/1_draft-program-environmen-1.pdf. Accessed January 2024.

Fresno County General Plan Policy Document. October 3, 2000. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/18117-2000-general-plan-policy-document.pdf. Accessed January 2024.

Fresno County Public Library, About the Library. Available at: https://www.fresnolibrary.org/about/index.html. Accessed January 2024.

Fresno County Public Library, Clovis Regional Library. Available at: https://www.fresnolibrary.org/branch/clo.html. Accessed January 2024.

Fresno County Rural Transit Agency, Route Services. Available at: https://www.ruraltransit.org/route-services/. Accessed April 2024.

Fresno County Zoning Ordinance – Land Use and Planning. Last date amended, June 12, 2018. Available at: https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/development-services-division/zoning-ordinance. Accessed January 2024.

Fresno County Zoning Ordinance, Section 816, "AE" – Exclusive Agricultural District. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/36254-816ae_6-18_final.pdf. Accessed January 2024.

Fresno County Zoning Ordinance, Section 817, "AL" – Limited Agricultural District. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/36256-817al_6-18_final.pdf. Accessed January 2024.

Fresno County Zoning Ordinance, Section 820, "R-R" – Rural Residential District. Available at: https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/36258-820r-r_6-18_final.pdf. Accessed January 2024.

Fresno LAFCo Annexation Program Guidelines. Available at: https://www.fresnolafco.org/files/83ec3cf92/Attachment+-+MAP.pdf#:~:text=It%20is%20Fresno%20LAFCo%20policy%20%28102-01%29%20that%20"within,within%20the%20sphere%20of%20influence%20of%20an%20agency." Accessed January 2024.

Fresno Metropolitan Flood Control District, About Fresno Metropolitan Flood Control District. Available at: https://www.fresnofloodcontrol.org/. Accessed February 2024.

7.0 REFERENCES

Fresno Metropolitan Flood Control District, Annual Budget Fiscal Year Ending June 30, 2023. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/2022-2023-Annual-Budget.pdf. Accessed February 2024.

Fresno Metropolitan Flood Control District, Big Dry Creek Dam. Available at: https://fresnometroh2o.com/dams/big-dry-creek-dam/. Accessed February 2024.

Fresno Metropolitan Flood Control District, Flood Control Program. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Flood-Control-Program-Fact-Sheet.pdf. Accessed February 2024.

Fresno Metropolitan Flood Control District, Fresno-Clovis Storm Water Quality Management Program FY 2019-20 Annual Report. October 2020. Available at: https://www.fresnofloodcontrol.org/wp-content/uploads/2022/09/Fresno-Clovis-Storm-Water-Quality-Management-Program-2019-2020-Annual-Report.pdf. Accessed February 2024.

Fresno Metropolitan Flood Control District, Fresno Metropolitan Flood Control District Comments for Notice of Preparation of an Environmental Impact Report for Vista Ranch Project. November 17, 2023.

Fresno Multi-Jurisdictional 2015-2023 Housing Element, A Regional Plan for Addressing Housing Needs, Goals and Policies. Adopted April 2016. Available at: https://cityofclovis.com/wp-content/uploads/2019/02/Clovis-Housing-Element-1.pdf. Accessed January 2024.

Griffith, G.E., Omernik, J.M., Smith, D.W., Cook, T.D., Tallyn, E., Mosely, K., and Johnson, C.B. 2016. Ecoregions of California. U.S. Geological Survey Open-File Report 2016-1021. Available: https://pubs.usgs.gov/publication/ofr20161021. Downloaded: March 2024.

International Code Council, Inc., 2021 International Fire Code (IFC). Available at: https://codes.iccsafe.org/content/IFC2021P2. Accessed January 2024.

International Code Council, Inc., 2022 Fire Code, Title 24, Part 9. Available at: https://codes.iccsafe.org/content/CAFC2022P1. Accessed January 2024.

Jepson Flora Project. 2024. Geographic Subdivisions of California. Available: https://ucjeps.berkeley.edu/eflora/geography.html. Accessed: March 2024.

Kittelson & Associates, Transportation Analysis Report. 2024.

Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Residential Development, Behymer and Armstrong Avenues, Clovis, California. March 10, 2021.

Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Triangle Development, Shepherd and Temperance Avenues. Clovis, California. January 31, 2024.

Krazan & Associates, Inc., Geotechnical Feasibility Evaluation, Triangle Development, Shepherd Avenue and Locan Avenue, Clovis, CA. December 7, 2023. Revised January 4, 2024.

Krazan & Associates, Inc., Phase I Environmental Site Assessment, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. February 24, 2021.

Krazan & Associates, Inc., Phase I Environmental Site Assessment, Triangle Property, East Shepherd and North Temperance Avenues (APN 557-031-023, 558-010-25, 557-031-35, 557-031-44S, 557-031-05S), Fresno, California. February 3, 2023.

Krazan & Associates, Inc., Report of Findings, Phase II Limited Subsurface Survey and Soil Pile Sampling, Shepherd North Properties, North Side of East Shepherd Avenue, Clovis, California. August 30, 2021.

Legislative Analyst's Office, The California Legislature's Nonpartisan Fiscal and Policy Advisor. Available at: https://lao.ca.gov/ballot/2015/150023.pdf. Accessed January 2024.

Longcore, T., and Rich, C. 2004. Ecological Light Pollution. *Frontiers in Ecology and the Environment* 2:4:191 – 198.Available: https://esajournals.onlinelibrary.wiley.com/doi/full/10.1890/1540-9295%282004%29002%5B0191%3AELP%5D2.0.CO%3B2. Downloaded: April 2024.

Maners, S., and Smith, E. (Vollmar Natural Lands Consulting). Pers. comm. Written communication to Anna Buising (Redtail Consulting), April 4, 2024. On file with Redtail Consulting, Fremont, CA.

MD Acoustics, Inc., Vista Ranch Project, Noise Impact Study, City of Clovis, CA. April 18, 2024.

Miller, M.W. 2006. Apparent Effects of Light Pollution on Singing Behavior of American Robins. The Condor 108:130 – 139. Available: https://www.jstor.org/stable/4123202. Downloaded: April 2024.

National Weather Service. *n.d.* Monthly Climate Normals (1992 – 2020) – Fresno Area, CA. Available: https://www.weather.gov/wrh/Climate?wfo=hnx. Accessed: March 2024.

NFPA Standard 1710, Organization and Deployment of Fire Suppression Operations, EMS and Special Operations in Career Fire Departments. Available at: https://www.iaff.org/wp-content/uploads/Departments/Fire_EMS_Department/30541_Summary_Sheet_NFPA_1710_standard.pdf. Accessed January 2024.

Norris, R.M., and Webb, R.W. 1990. *Geology of California*. (2nd Edition.) John Wiley & Sons, New York, NY.

Odell Planning and Research, Inc., School Facilities Needs Analysis, prepared for Clovis Unified School District, April 2023. Available at: https://www.cusd.com/DeveloperFees.aspx. Accessed January 2024.

Pacific Gas and Electric. 2022 Content Label. 2023. Available at: https://www.pge.com/content/dam/pge/docs/account/billing-and-assistance/power-content-label.pdf. Accessed April 26, 2024.

Perry, G., Buchanan, B.W., Fisher, R.N., Salmon, M., and Wise, S.E. 2008. Effects of Artificial Night Lighting on Amphibians and Reptiles in Urban Environments. *Herpetological Conservation* 3:211 – 228. Available: https://www.researchgate.net/publication/239531413_Effects_of_artificial_night_lighting_on_amphibians_and_reptiles_in_urban_environments. Downloaded: April 2024.

Provost & Pritchard Consulting Group, City of Clovis Urban Water Management Plan 2020 Update. July 2021. Available at: https://cityofclovis.com/wp-content/uploads/2021/08/2020-UWMP-Adopted-July-2021_reduced.pdf. Accessed February 2024.

Provost & Pritchard, City of Clovis, Water Supply Assessment, Vista Ranch, March 2024.

Provost & Pritchard, North Kings Groundwater Sustainability Agency Groundwater Sustainability Plan. Adopted November 2019 (Revised June 2022). Available at: https://northkingsgsa.org/groundwater-sustainability-plan/. Accessed February 2024.

Provost & Pritchard, Water Infrastructure Investigation for Vista Ranch and Surrounding Areas. April 12, 2024.

Public Policy Institute of California, 2020 Census: Counting the San Joaquin Valley. Available at: https://www.ppic.org/blog/2020-census-counting-the-san-joaquin-valley/. Accessed April 2024.

Ramboll U.S. Consulting Inc., Analysis of Potential Health Effects of Criteria Pollutant Emissions Impacts, North Manteca Annexation #1 Project. March 2024.

Redtail Consulting, Wilson Premier Homes – Vista Ranch, Mitigation Overview. December 2023.

Redtail Consulting. 2024. Application for Incidental Take Authorization for California Tiger Salamander, San Joaquin Kit Fox, and Crotch Bumble Bee. (Draft, February.) Fremont, CA. Prepared for Wilson Premier Homes, Fresno, CA.

San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impact. Available at: https://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf. Accessed April 23, 2024.

San Joaquin Valley Air Pollution Control District. 2016 Plan for the 2008 8-Hour Ozone Standard, Available at: http://www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm. Accessed April 23, 2024.

San Joaquin Valley Air Pollution Control District. Building Clean Air Measures Into Your Project Indirect Source Review Rule. 2023. Available at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/isr-annual-report/. Accessed April 2024.

San Joaquin Valley Air Pollution Control District. Frequently Asked Questions, Available at: http://www.valleyair.org/general_info/frequently_asked_questions.htm#What%20is%20being%20done%20to%20improve%20air%20quality%20in%20the%20San%20Joaquin%20Valley. Accessed March 3, 2020.

San Joaquin Valley Air Pollution Control District. Grants and Incentives. Available at: https://ww2.valleyair.org/grants/. Accessed April 2024.

San Joaquin Valley Air Pollution Control District. Indirect Source Review. 2017. Available at: https://www.valleyair.org/rules/currntrules/r9510-a.pdf. Accessed April 2024.

San Joaquin Valley Air Pollution Control District. Ozone Plans. Available at: http://www.valleyair.org/ Air_Quality_Plans/Ozone_Plans.htm. Accessed April 23, 2024.

San Joaquin Valley Air Pollution Control District. Particulate Matter Plans. Available at: http://valleyair.org/Air_Quality_Plans/PM_Plans.htm. Accessed April 23, 2024.

Smith, E. (Vollmar Natural Lands Consulting). Pers. comm.[a]. Telephone conversation with Anna Buising (Redtail Consulting), April 4, 2024.

Smith, E. (Vollmar Natural Lands Consulting). Pers. comm.[b]. Written communication to Anna Buising (Redtail Consulting), June 17, 2024.

Smith, E. (Vollmar Natural Lands Consulting). Pers. comm[c]. Telephone conversation with Anna Buising (Redtail Consulting), February 20, 2024.

Smith, E. (Vollmar Natural Lands Consulting). Pers. comm[d]. Telephone conversation with Anna Buising (Redtail Consulting), April 30, 2024.

State Water Resources Control Board, GeoTracker, Data Search. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=clovis. Accessed February 2024.

Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols. Accessed: April 2024.

United States Bureau of Reclamation (Knodel, Paul C.), Characteristics and Problems of Collapsible Soils. February 1992. Available at: https://www.usbr.gov/tsc/techreferences/rec/R9202.pdf. Accessed February 2024.

United States Code, Title 16, Chapter 1c, Section 470aaa, Definitions. Available at: https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title16-section470aaa&num=0&edition=prelim. Accessed February 2024.

United States Department of Agriculture, Natural Resources Conservation Service, NRCS Custom Soil Survey, January 2024.

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm. Accessed March 2024.

United States Department of Transportation, Federal Highway Administration, FHWA-RD-77-108, FHWA Highway Traffic Noise Prediction Model, Highway Noise. 1978. Available at: https://rosap.ntl.bts.gov/view/dot/30259/dot_30259_DS1.pdf. Accessed April 2024.

United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Federal Hazmat Law, An Overview of Federal Laws for Hazardous Materials Transportation. Available at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-09/Hazmat%20Law%20Overview_September-2021_0.pdf. Accessed February 2024.

United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, Transit Noise and Vibration Impact Assessment. May 2006. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf. Accessed April 2024.

United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Natural Gas Pipeline Safety Act of 1968. Available at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/Natural%20Gas%20Pipeline%20Safety%20Act%20of%201968.pdf. Accessed February 2024.

United States Energy Information Administration. California State Profile and Energy Estimates. 2023. Available at: https://www.eia.gov/state/?sid=CA. Accessed April 2024.

United States Environmental Protection Agency, About EPA, EPA Region 9 (Pacific Southwest). Available at: https://www.epa.gov/aboutepa/epa-region-9-pacific-southwest. Accessed February 2024.

United States Environmental Protection Agency. 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Available at: http://www.epa.gov/otaq/climate/documents/420f12051.pdf. Accessed April 2024.

United States Environmental Protection Agency, California Clean Air Technology Initiative (CATI) Projects. Available at: https://www.epa.gov/cati/california-clean-air-technology-initiative-cati-projects. Accessed April 2024.

United States Environmental Protection Agency, Clean Air Act Overview, Clean Air Act Text. Available at: https://www.epa.gov/clean-air-act-overview/clean-air-act-text#toc. Accessed February 2024.

United States Environmental Protection Agency, Introduction to the Clean Water Act. Available at: https://cfpub.epa.gov/watertrain/moduleFrame.cfm?parent_object_id=2569. Accessed March 2024.

United States Environmental Protection Agency, Laws & Regulations, Summary of the Clean Water Act, 33 USC Section 1251 et seq. (1972). Available at: https://www.epa.gov/laws-regulations/summary-clean-water-act. Accessed February 2024.

United States Environmental Protection Agency, National Service Center for Environmental Publications (NSCEP), Fiscal Year 2001 Annual Report. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/50000UQM.PDF?Dockey=50000UQM.PDF. Accessed February 2024.

United States Environmental Protection Agency, Semiannual Report of UST Performance Measures, End of Fiscal Year 2023 (October 01, 2022 – September 30, 2023). Available at: https://www.epa.gov/system/files/documents/2023-11/fy-23-eoy-final-report-11-21-2023.pdf. Accessed February 2024.

United States Environmental Protection Agency, Superfund, Superfund: CERCLA Overview. Available at: https://www.epa.gov/superfund/superfund-cercla-overview#:~:text=The%20Comprehensive%20Environmental%20Response%2C%20Compensation%2C%20and%20Liability%20Act%20of%201980,waste%20at%20these%20sites%3B%20and. Accessed February 2024.

United States Geological Survey, Earthquake Magnitude, Energy Release, and Shaking Intensity. Available at: https://www.usgs.gov/programs/earthquake-hazards/earthquake-magnitude-energy-release-and-shakingintensity#:~:text=Moment%20Magnitude%20(MW)%20is,magnitude%20range%20where%20they%20overlap. Accessed February 2024.

United States Geological Survey, Hydrologic Unit Maps: What are Hydrologic Units? Available at: https://water.usgs.gov/GIS/huc.html. Accessed February 2024.

United States Geological Survey, Land Subsidence. Available at: https://www.usgs.gov/mission-areas/water-resources/science/land-subsidence#overview. Accessed February 2024.

United States Geological Survey, Lateral Spread. Available at: https://www.usgs.gov/media/images/lateral-spread. Accessed February 2024.

United States Geological Survey, The Modified Mercalli Intensity Scale. Available at: https://www.usgs.gov/programs/earthquake-hazards/modified-mercalli-intensity-scale. accessed February 2024.

United States Geological Survey, What is a fault and what are the different types? Available at: https://www.usgs.gov/faqs/what-a-fault-and-what-are-different-types. Accessed February 2024.

University of California, Davis, Riverwash. Available at: https://lawr.ucdavis.edu/classes/ssc118/Colusa_County/riverwash.html. Accessed February 2024.

University of California, Publication 8194. Available at: https://anrcatalog.ucanr.edu/pdf/8194.pdf. Accessed February 2024.

U.S. Environmental Protection Agency Office of Wastewater Management. 2012. Water Permitting 101. Available: https://www3.epa.gov/npdes/pubs/101pape.pdf. Accessed: April 2024.

U.S. Fish and Wildlife Service. 1999. Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or during Ground Disturbance. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols. Accessed: April 2024.

U.S. Geological Survey. 2006. Draft USGS Western Pond Turtle (*Emys marmorata*) Visual Survey Protocol for the Southcoast Ecoregion. Available: https://wildlife.ca.gov/Conservation/Survey-Protocols. Accessed: April 2024.

Venecek, M. A., Yu, X., and Kleeman, M. J.: Predicted ultrafine particulate matter source contribution across the continental United States during summertime air pollution events, Atmos. Chem. Phys., 19, 9399–9412, https://doi.org/10.5194/acp-19-9399-2019, 2019.

Volmar Natural Lands Consulting, Delineation or Potential Jurisdictional Aquatic Resources, Vista Ranch Project Site, Fresno County, California. August 17, 2023.

Vollmar, J. (Vollmar Natural Lands Consulting). Pers. comms. Telephone conversations with Anna Buising, Redtail Consulting. June – August, 2023.

Vollmar Natural Lands Consulting. 2021. Madera Terrace Conservation Bank Draft Prospectus. Prepared for Jamison Trust/Elizabeth Cardoza (Landowner), Madera, CA. (November.) Sacramento and Berkeley, CA. On file with Redtail Consulting, Fremont, CA.

Vollmar Natural Lands Consulting. 2021. Madera Terrace Conservation Bank Draft Prospectus. Prepared for Jamison Trust/Elizabeth Cardoza (Landowner), Madera, CA. (November.) Sacramento and Berkeley, CA. On file with Redtail Consulting, Fremont, CA.

Vollmar Natural Lands Consulting. 2023a. Delineation of Potential Jurisdictional Aquatic Resources, Vista Ranch Project Site, Fresno County, California. Prepared for Wilson Premier Homes,

Fresno, CA. Sacramento and Berkeley, CA. On file with Redtail Consulting, Fremont, CA and U.S. Army Corps of Engineers, Sacramento District, Regulatory Division. Verified November 9, 2023.

Vollmar Natural Lands Consulting. 2023b. Vista Ranch Project, Wilson Homes, Fresno County, California: Biological Assessment for Endangered Species Act Section 7 Consultation. (Draft, August 2023.) Prepared for Wilson Premier Homes, Fresno, CA. Sacramento and Berkeley, CA. On file with Redtail Consulting, Fremont, CA.

Vollmar Natural Lands Consulting. 2023c. Rare Plant Survey Report, Vista Ranch Project Site, Fresno County, California. Prepared for Wilson Premier Homes, Fresno, CA. Sacramento and Berkeley, CA. On file with Redtail Consulting, Fremont, CA.

Vollmar Natural Lands Consulting. 2023d. Dry Soil Analysis for the Detection of Federally-Listed Large Branchiopods at the Vista Ranch Development, Fresno County, California (USFWS# RP-Vista Ranch-2023-0927). Prepared for Vollmar Natural Lands Consulting, Sacramento, CA by Helm Biological Consulting, Sheridan, CA. On file with Redtail Consulting, Fremont, CA.

Willams, P.H., Thorp, R.W., Richardson, L.L. and Colla, S.R. (2014). *The Bumble Bees of North America: an Identification Guide*. Princeton, NJ. Princeton University Press.

Wilson Premier Homes. 2023. Vista Ranch Master Development Plan, Clovis, CA (Draft Submittal). (September.) Prepared for Wilson Premier Homes, Fresno, CA by Broussard & Associates, Clovis, CA, Kroll & Associates, Clovis, CA, and Harbour & Associates, Clovis, CA. On file with Redtail Consulting, Fremont, CA,

Xerces Society. 2024. California Bumble Bee Atlas. Available: https://www.cabumblebeeatlas.org/. Accessed: April 2024.

This page left intentionally blank.